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RAILWAY AGE

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WEEK AT A GLANCE

NEW FREIGHTHOUSES FOR NORTHERN PACIFIC: The Northern Pacific has recently modernized and largely mechanized its freighthouses at Billings, Mont., Missoula, and Tacoma, Wash. An illustrated article starting on page 46 describes in detail the new facilities at all three points, and also lists the mechanical equipment installed to improve service, cut costs and reduce damage.

"MEAL TICKET" RATES?: This week's leading editorial (page 43) suggests that it would be economically sound to apply the "meal ticket" principle to railroad rates — by giving special rates to those steady customers who, whether from choice or necessity, regularly use rail service for all tonnage suited to rail movement. The editorial makes out a strong case for such treatment of these regular shippers, pointing out in the process that they are now required to pay for their transportation service on the same level as those occasional shippers who give most of their traffic to competitive transportation agencies, but for whose emergency convenience the railroads must maintain expensive "stand-by" facilities.

PROTECTING THE FREIGHT: With claims for damage to freight a constant and serious problem, any development —mechanical, engineering, operating or educational—which holds promise of reducing freight damage deserves careful attention. An article beginning on page 58 describes the procedures and results of tests of different types of high-speed freight-car trucks conducted by the New York Central to determine which type would give maximum protection to both cars and lading in its "Pacemaker" merchandise service. The article is a condensation of a paper presented to the American Society of Mechanical Engineers at its recent New York meeting by three N.Y.C. officers—P. W. Kiefer, chief engineer of motive power and rolling stock; A. M. Miers, assistant engineer, and L. D. Hays, air brake engineer. A paper on the operating and traffic aspects of "Pacemaker" service, also presented to the A.S.M.E., was published in last week's *Railway Age*.

THE WEAKEST LINK: A short illustrated article on page 53 tells how the Chicago, Indianapolis & Louisville eliminated the weakest point on its entire system—a 962-ft. trestle over a quicksand bog—by relocating four miles of line near Cedar Lake, Ind.

CONSTRUCTION DEVELOPMENTS: The Construction section of our News Department reports some major projects either under way or contemplated for the near future. The Chicago, Rock Island & Pacific has begun work on a $2,000,000 yard near Kansas City, Kan.; the Louisville & Nashville has authorized a new yard at Dent, Ky., to cost nearly $1,000,000; the Norfolk & Western has announced plans for a $1,800,000 stores building at Roanoke, Va.; and an Interstate Commerce Commission examiner has recommended that the Wabash be authorized to relocate some 11 miles of line in Illinois.

RATE CASE SUBMITTED TO I.C.C.: Following the hearings which have been reported in the two preceding issues of *Railway Age*, the railroads, on December 8, 9 and 10 submitted to the full Interstate Commerce Commission their oral argument on their Ex Parte 168 freight rate increase application. The argument wasn't a one-way affair, for various opponents of the increase were naturally given full opportunity to express their opinions also. The views of both proponents and opponents are summarized in a four-page report beginning on page 50.

GETTING READY FOR CONGRESS: With the opening of the 81st Congress only a few weeks away, news of possible legislation is beginning to come again to the fore. As reported in our news pages, for example, President Truman has again come out in favor of the St. Lawrence Seaway. And he wants all or nothing — power and navigation. The brothers, through the Railway Labor Executives' Association, have announced that they will plug for repeal of the Taft-Hartley Act, and for a minimum hourly wage of one dollar (or more), and will oppose any legislation like the Jennings bill to limit venue in liability cases.

FREIGHT CARS AND STEEL: Everyone concerned — railroads, car builders, government officials and the Steel Products Advisory Committee of the Commerce Department's Office of Industry Cooperation—apparently favors extension for six or seven months beyond February 28, 1949, of the voluntary agreement covering allocation of enough steel to permit construction of 10,000 freight cars per month. So much was established at a hearing held in Washington on December 9 and reported in our news pages. Unfortunately, the unanimity doesn't seem to extend to the demand of Office of Defense Transportation Director J. Monroe Johnson for substantial increases in such allocations—a demand which was only incidentally considered at the December 9 hearing.

MODERNIZED FREIGHT HANDLING: Mechanization of freight stations can be of great benefit to the railroads—by saving time and money, reducing damage to freight, and providing better service to shippers. But selection of mechanized equipment and training of employees in its proper use is a job for experts—not a haphazard undertaking. Benefits of mechanization are not confined solely to large stations. These are some of the points brought out in a report to the Association of American Railroad Superintendents by a committee headed by W. J. Silich, manager of station service, Delaware, Lackawanna & Western. The report, and the discussion which followed its presentation, are reviewed in an illustrated article beginning on page 54.

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RATE FAVORS FOR STEADY CUSTOMERS?

No interests in and around the transportation business are suffering more from the chaotic confusion in governmental policy toward transportation than those shippers who regularly move most of their products by rail, whether by choice or necessity. By June of the current year, railway freight rates had been increased cumulatively—since June, 1946—by percentages estimated to yield to the railroads an increase of approximately 43 per cent, but the *actual* increase in revenue per ton-mile from June, 1946, to June, 1948, was only 37 per cent. The failure of the actual increase to keep pace with the estimated increase, beyond any doubt, is at least in part explainable by the diversion of higher-rated traffic to other agencies of transportation.

Larger Net Revenues Essential

The railroads *must* have larger net revenues than they have been earning if they are to provide the constant inflow of new capital necessary for the maintenance of their essential service to commerce and the national defense. They can secure such increased revenues only by getting higher rates on the traffic which actually moves by rail. Some shippers appear to believe that they make a case against further rate increases by showing that some diversions of traffic result from these increases. They are mistaken, because adequate railroad service cannot be maintained without larger net revenues and, since there is no substitute for railroad service for the larger part of the country's commerce, there is no alternative to requiring "rail-bound" traffic to yield rates which will support the service. Thus diversion of traffic to socialist-financed transportation facilities (highways and waterways) is the concern, primarily, of shippers who must continue to give their tonnage to the railroads. The goods that move by rail have to "pay the freight" if the railroads are to continue privately owned and privately financed—and the more traffic there is which avoids movement by rail, the more of the "freight" there is left to be paid by the traffic which stays rail-borne.

It is strange that this situation should be so widely considered a dilemma for railway management—and for hardly anyone else. Actually, no dilemma for railway management is involved, because only one course of action is open to management. This course—so long as "rail-bound" shippers fail to lend effective aid in preventing diversion of traffic to socialized transportation agencies—is simply to exert every effort to collect remunerative revenues from the traffic which continues to move by rail. The diversion of tonnage away from the railroads—to transportation agencies financed so the patron shifts a large part of his shipping costs from his own shoulders to those of the taxpayers—is an in-

jury and an affront to shippers who cannot conveniently make this shift, even more than it is to railway management. It is, moreover, a challenge to the authorities whose duty it is to provide for the national defense—including the indispensable ingredient of efficient and dependable domestic transportation.

Getting a solution to this problem will require more than putting socialized transportation facilities on an economically competitive basis of self-support through tolls. To play fairly with their sustaining traffic and to encourage it to remain in that category, the railroads should be permitted and actively encouraged to discriminate in their charges between shippers who use rail services regularly for all tonnage suited to movement by rail, and those who use the railroads only in a pinch and for unattractive traffic.

There are shippers who provide, by truck or barge, for their own minimum transportation requirements, with full loading of their equipment in both directions. They use the railroads only to the extent necessary to correct the imbalance in their traffic, and to accommodate "peak" and emergency movements. There are other shippers who give their clean and heavy-loading traffic to the trucks, using the railroads only for the feathers, lampshades and dirty articles which damage other lading. The railroads are the only truly *common* carriers, accepting all kinds of traffic at all times—as all informed shippers are well aware. Accepting this responsibility because they cannot avoid it, the railroads are forced to incur the expense of providing "stand-by" facilities to enable them to serve those shippers who use the railroads only when other agencies are not conveniently available. The principles of economics and ethics alike are violated when regular patrons are required to pay for their transportation service at a level just as high as that offered to those shippers whose practices force the railroads to go to the extra expense of providing capacity which is used only occasionally.

The "Meal-Ticket" Principle

The principle of the meal-ticket—lower rates for steady customers in businesses where there is large "overhead" expense—has long been recognized as economically sound. This principle is conceded by regulatory authorities for the electric utilities, which apply meal-ticket rates as a matter of course in meeting the competition of industry-produced power. The principle was not extended to the railroads in the early days of their regulation because there was then no effective competition with the railroads—and, with the customary lag of regulatory practice behind the conditions which confront it, the principle is still not recognized. The obligations surrounding the "common carrier" status were developed under conditions where the carriers were getting the "cream" and hence could justly be required to accept the "skim milk." These obligations vanish—alike as a matter of public interest, of justice, and of practicability—when the "cream" is taken away. Unless those who earn a living by regulating common carriers take action to recognize this distinction, they may one day find that there are no common carriers left for them to regulate.

If there are any who are reluctant to accept discriminatory rate treatment in favor of regular patrons of railroad service, then let them offer an equally effective alternative solution to this problem. The problem itself will not fade away merely from failure to admit its existence. It is time for those who profess to believe in the continuance of private enterprise in the transportation business to begin to act as well as speak in promotion of that objective; and to support the necessary measures. One such necessary measure, beyond any doubt, is to relieve the railroads and their regular patrons of the expense of maintaining "stand-by" facilities for customers who regularly give all or most of their attractive business to other carriers.

KEEP THE DOOR OPEN TO ALL SUGGESTIONS

One of the most significant developments in the history of the railroads is the forward surge in recent years of scientific research in the mechanical, engineering, and maintenance-of-way departments, replacing guesswork, rule-of-thumb methods, and the acceptance of many long-standing problems as insoluble. There are already achievements from this scientific approach to specific physical problems which indicate its certain fruitfulness.

The brighter outlook for profitable results from this research lies not alone in the improved equipment made available, but in the fact that to an increasing degree the work is being put in the hands of analytically minded men who are not burdened with routine departmental duties. It is a happy situation to see this work delegated to selected, specially qualified men from the railroads' own ranks, and also to outside specialists who bring a fresh outlook to every problem.

The railroads might profitably go still further in this regard—that is, giving a receptive ear to "outsiders," and keeping their own eyes and ears open for improved practices in other industries, no matter how unrelated they may seem to be to the railroads. Those who make suggestions, if not identified directly with the railroads, are sometimes writ-

ten off as "cranks" or "nuts," and their suggestions dismissed with the observation that "they couldn't know the problems and their solution." This attitude overlooks entirely the fact that many if not most of the fundamental scientific principles on which the railroads operate are not indigenous to the railroad industry, but are adaptations from "outside"—e.g., both the steam and Diesel locomotive.

The extent of the changes in recent years in motive power and rolling stock, in features of track construction, and in maintenance-of-way practices and equipment, suggests that such changes are only in their infancy.

STATISTICAL CONFUSION

An editorial discussion of the desirability of providing modern facilities for repairing steam locomotives appeared in the October 23 issue of this paper under the title "Is the Big Job Being Neglected?" The analysis cited statistics to support the conclusion that—because the major portion of the locomotive inventory of the United States is still steam and because steam locomotives do most of the railroads' work—the railroads could profitably devote more attention than they are devoting to the modernization of steam locomotive maintenance facilities.

The fact is that most steam locomotive maintenance facilities are obsolete; and obsolete facilities run up maintenance costs out of proportion to their value.

Included in the comment was the statement that, for the year 1947, 33 per cent of the inventory—namely Diesel switchers—were performing 31 per cent of the yard switching-hours and that the steam portion of the inventory—66 per cent—was performing 67 per cent of the work. The accuracy of these figures has been questioned.

Unfortunately, except on individual roads where detailed figures are available, exact and direct comparisons are not always possible. The statistics of the railroads as a whole naturally involve a number of factors that affect the accuracy of comparisons.

Inventory figures cited in our discussion were related to performance figures which were based upon assignments of locomotives rather than upon ownership. For example, in the month of August, 1948, the 3,363 Diesel-electric locomotives *assigned* to yard switching operations performed 37.7 per cent of the yard switching service-hours in both freight and passenger service. In the same month, 9,649 steam locomotives *assigned* to freight and passenger yard switching operations performed 61.3 per cent of the total yard switching service-hours.

In spite of the fact that the statistics of locomotives assigned to specific classes of service often show more units assigned than are owned, it may be worth while to relate the performance of locomotive units to the total number assigned rather than to the total number owned. On this basis, in August, 1948, the 3,363 Diesel-electric locomotives performed an average of 570 hours of service per locomotive assigned and in the same month the 9,649 steam locomotives performed 323 hours of service per locomotive. This reflects the obvious necessity of assigning Diesel switchers to jobs where they can be kept busy "around the clock." The steam locomotives assigned to switching service are given the remainder of the jobs, a large part of which are of a character permitting considerably less than 16 hours a day of service from them.

It may be that this revision of statistics will clear a point in question. While the relationships are slightly different than previously stated, they are not sufficiently different to alter the conclusion that steam power in this country is still the largest part of the inventory and is doing the major portion of the job. On that basis alone the necessity for modernizing steam locomotive maintenance facilities both in shops and engine terminals seems obvious. An interesting fact related to this discussion is that the railroads spent more money, in 1947, for maintaining the reduced inventory of steam locomotives than they did in 1929 when steam locomotives constituted the entire inventory.

MEMO TO THE RAILWAYS

If a thing of beauty is a joy forever, as the poet says, then an attractive and well-kept garden around a railroad station must at least be something that leaves a long and favorable impression upon the traveler whose eye for beauty is quickened after passing through dreary stretches of scrub woods, railroad yards and factory areas. Leaving a modern railway car with all its dainty appointments at a drab and dusty way station gives the impression of having made a mistake, of having left the right world to enter the wrong one, of beginning or ending one's journey on the wrong foot.

It was natural to think of this recently after reading an article in The American Swedish Monthly, published by the Swedish Chamber of Commerce of the United States, which explained that gardening is just about second only to transportation service among the railroad people of Sweden. There, we are told, every railway station throughout the country is surrounded by a flower garden, some of which are so elaborate they constitute a community park.

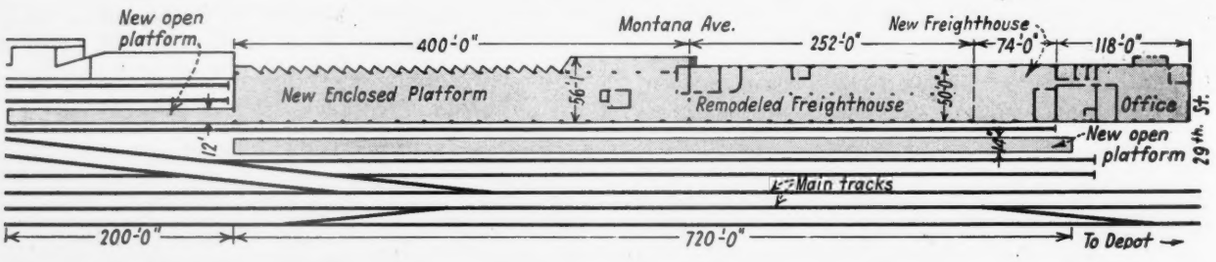
There is a sense of beauty that certainly commends itself to our railroad people. It is true that they haven't recovered from their strenuous efforts of the war years and are still struggling with some pretty fundamental problems. Nevertheless, we think they might well keep the challenge of Sweden in mind.

—*The New York Times*

NEW FREIGHTHOUSES BOOST

Enlarged modern facilities at three points on the Northern Pacific also feature mechanized equipment in the interest of increased efficiency and lower handling costs

Above—The new Billings freighthouse from the Montana Avenue side. Below—Plan of the new and remodeled facilities at Billings



The Northern Pacific's enlarged and modernized freighthouse at Tacoma

SERVICE TO SHIPPERS

With the completion recently of up-to-date freighthouses at Billings, Mont., and Missoula, and Tacoma, Wash., and the installation at each location of mechanical freight-handling equipment, the Northern Pacific has made substantial progress in a program of modernizing freight-station operations to improve service to shippers and to save money.

This program contemplates not only that the road will be prepared to consolidate its own shipments on pallets, or in containers, at all transfer points, but also that it will be in a position to handle palletized and skidded shipments tendered to it by shippers, without the necessity of breaking down unit loads. This kind of service is now available at Billings, Missoula and Tacoma, as well as at other major shipping points on the N.P. system. Fork-lift trucks and pallet operations at these locations have practically eliminated the use of two-wheel hand trucks except as auxiliary equipment. It is conservatively estimated that 75 per cent of the tonnage transferred at these points is now handled on pallets. The approximate cost of the new facilities amounted to $390,000 at Billings, $205,000 at Missoula, and $174,000 at Tacoma.

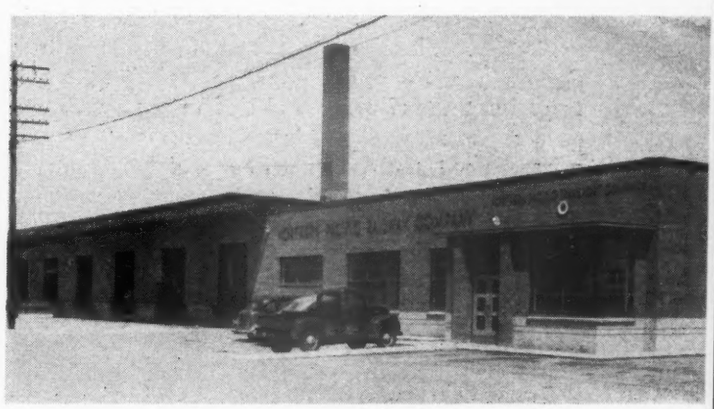
At the present time the Billings station handles freight at a rate of about 83,000 tons a year. Of this tonnage 52 per cent is received and forwarded via rail, while the remainder is handled by trucks of the Northern Pacific Transport Company and the Burlington Truck Lines. The old freighthouse, a 50-ft. by 252-ft. structure with a 400-ft. covered platform, was entirely too small to handle this business; the office was overcrowded, the warehouse congested, and the trucking business was encroaching on space required for rail shipments. It was built in 1909 when the population of Billings was 10,000; the present population is about 40,000.

The new freighthouse is 50 ft. wide by 844 ft. long. This length includes 118 ft. of office space; 326 ft. of freighthouse embodying 252 ft. of the old structure, which was completely remodeled, and 74 ft. of new construction; and 400 ft. of new enclosed platform. In addition there is a new 12-ft. by 200-ft. covered platform at one end of the freighthouse and a new 14-ft. by 720-ft. covered island platform between two of the house tracks.

To permit uninterrupted service to shippers during construction, the freighthouse was built in three steps. In the first step the office and the 74-ft. section of new freighthouse were constructed. The next step was the building of the 400-ft. enclosed platform. The final step was the remodeling of the old 252-ft. freighthouse, including the conversion of the office contained therein, and the construction of the two covered platforms.

The new portion of the freighthouse and office is a structure of modern design with brick walls on concrete foundations, steel roof trusses, a built-up roofing on wood sheathing and reinforced-concrete floors — the floors being covered with asphalt tile in the offices. The office portion includes a private office for the agent, a large roomy area for the general offices, and, in addition, an office for the Billings telegraph operators, a general yard office, toilet rooms, and a record and storage room. A basement is provided for the boiler room and a second record storage room. The interiors of the offices are plastered and painted. Features provided to insure pleasant working conditions include ample window areas, fluorescent lighting, venetian blinds, and an evaporator cooling system which is highly efficient with the dry western air. Heating is provided by a natural-gas-fired boiler and thin cast-iron radiators recessed into the walls.

The new enclosed platform has a structural-steel frame and roof trusses, with outside walls of corrugated Transite, 3/16 in. thick. The roof is of wood



Above—Street-side view of the Missoula freighthouse showing the office section and the warehouse

Below—Fork-lift trucks at the new N.P. freighthouses have practically eliminated the need for two-wheel hand trucks except as auxiliary equipment

sheathing covered with built-up roofing. The trusses have a clear span over the entire width of the floor. The floor is a reinforced-concrete slab resting on a compacted sand fill. The platform is of the saw-tooth type on the street side, with 23 cut-ins or niches into which trucks and trailers can be backed to keep clear of the street while loading or unloading. The walls on both the street and track sides of the platform are given over almost completely to door openings, all fitted with doors of the overhead type, which are raised and lowered by manually operated chain hoists.

The remodeling of the old freighthouse and office consisted of replacing or resurfacing the floors, and providing new and larger door openings and additional partitions for office and working space. This portion of the freighthouse includes the warehouse foremen's office, coopering room, warm room, and a locker and lunch room for the warehouse employees. Another feature designed to increase the station's efficiency is a pneumatic-tube conveyor system consisting of two 3-in. ducts, through which bills of lading can be quickly handled between the general freight office and the warehouse foremen's office.

The two new open platforms are of conventional type, constructed of creosoted timbers resting on concrete block supports. The creosoted lumber was prefabricated before shipment to the job site. Each platform has an umbrella-type canopy.

The mechanical equipment at the new Billings freighthouse includes 10 Clark gasoline-operated fork-lift trucks, each with a capacity of one ton, a Yale Ready-power fork-lift truck with a capacity of two tons, and an Automatic Transporter with a capacity of two tons. In 1946, before the new freight station was built, there were 131 two-wheel hand trucks in use on the Billings freight platform. In the new freighthouse the number of hand trucks has been reduced to 38, and these are used as auxiliary equipment.

The old freighthouse at Missoula, a structure 35 ft. wide by 325 ft. long, was built in 1897. Almost half of this building was destroyed by fire in December, 1945. The new freighthouse consists of a 40-ft. by 77-ft. one-story office, a 40-ft. by 200-ft. warehouse, and a 40-ft. by 200-ft. covered platform, making a total length of 477 ft. The office portion has 13-in. brick masonry walls, and a five-ply tar and gravel roof supported on steel trusses. The office floor is a 4-in. thick reinforced concrete slab covered with asphalt tile, except in the toilet-room areas, which have a linoleum covering. The walls are plastered and painted, but the ceilings are covered with ½-in. acoustical tile. As at Billings, venetian blinds and fluorescent lighting are provided.

The warehouse portion has a brick wall on the street side, a corrugated Transite face over a steel frame on the track side, and a steel-truss supported, five-ply tar and gravel roof. This portion of the freighthouse is separated from the offices by a fire wall and, in addition, is divided by another fire wall located about 72 ft. from the office end.

The new covered platform consists of a reinforced-concrete floor on a compacted fill and is covered by a roof, supported on steel trusses, similar to that of the warehouse. The sides of this portion of the freighthouse are open to a height of 10 ft. A large portion of the street side of the warehouse and platform has saw-tooth construction similar to that at Billings. Also, a pneumatic tube system connects the general offices and the warehouse foreman's office.

The mechanical equipment at Missoula includes three Clark gasoline-operated fork-lift trucks, each with a capacity of one ton, another fork-lift truck of the same type with a capacity of 1½ tons, and a two-ton Automatic Transporter. Missoula handles about 73 per cent of the freight tonnage handled at Billings. Of this only about 22 per cent is received and forwarded by rail, the remainder being handled by truck.

The new freighthouse at Tacoma consists of a two-story brick office building, 40 ft. by 70 ft., and a 55-ft. by 247-ft. brick warehouse section. With 143 ft. of the old warehouse (60 ft. wide) left in place, the total length of the new structure is 460 ft. Built in 1888, the old structure at this location was of frame construction and was heated by stoves. It was badly in need of repairs and afforded neither patrons nor employees modern facilities.

The mechanized freight-handling equipment at Tacoma consists of two one-ton Clark fork-lift trucks and a two-ton Automatic Transporter. This station handles only about 20 per cent as much tonnage as at Billings, but all tonnage is handled by rail.

The plans for the new structures at Billings and Missoula were prepared by Orr Pickering & Associates, architects of Billings, while those for the new freighthouse at Tacoma were prepared in the architect's office of the Northern Pacific. The building at Billings was constructed by the Hitz Construction Company, Billings, that at Missoula by the Boespflug Construction Company, Seattle, Wash., and that at Tacoma by the John H. Sellen Construction Company, Tacoma. All the work was carried out under the direction of the Northern Pacific's engineering department.

Communication...

Found Something Missing At Railroad Fair

BOSTON, MASS.

TO THE EDITOR:

I was very interested in reading that there is another railroad fair planned for the summer of 1949, similar to the one held this year.

When I attended the fair last summer, I was surprised to find that no facilities were provided where I could go and get railroad literature. It would have been very helpful if there had been a reading room or a railroad library. Therefore, I would like to suggest that one be included next summer. In this library could be found textbooks on railroad history, finance, management, maintenance, and current data on the latest railroad developments here and abroad. Here, too, could be on file descriptive pamphlets from railroads and railroad suppliers. Also included would be some of the better books containing railroad stories, and other literature that would give the country the railroad fever.

I feel that something like this would make another railroad fair of more real value.

CHARLES HARWOOD, JR.

RAILROAD RATE CASE SUBMITTED TO I.C.C.

Oral argument on Ex Parte 168 motion for interim relief ends with request for favorable action before "non-op" wage report introduces "complications"

Favorable action before December 17 on the railroads' Ex Parte 168 motion for an interim freight-rate increase of 8 per cent was asked of the Interstate Commerce Commission last week by Jacob Aronson, counsel for the carriers, who suggested that such prompt disposition not only would give the roads what they require "in the way of expedition," but also would avoid "complications" which might otherwise result from the emergency board report, due the 17th, on wage and rules demands of non-operating employees. The Aronson request came at the close of the three-day oral argument in the rate case, which was held before the entire commission and a cooperating committee of state commissioners at Washington, D. C., from December 8 to 10, inclusive.

In the argument sessions, which followed seven days of hearings before the commission's Division 2, the interim-relief proposal was opposed generally by representatives of shippers and other interested parties, who contended that the railroads had not shown that they were confronted with an "emergency" calling for relief without "full hearing." Mr. Aronson argued otherwise, refusing, as he put it, to subscribe to a definition which holds that there is no "emergency" until "the death rattle is heard in the patient's throat." Under the carriers' proposal, the 8 per cent increase proposed for immediate application would remain in effect while the commission passes on their basic petition's request for a permanent advance of 13 per cent.

Recalls Criticism of I.C.C.

The question as to what notice should be taken by the commission of the emergency-board report in the "non-op" case was raised by Commissioner Aitchison. He recalled that the commission was criticized in a similar past situation for ignoring "what all the world knew," when it failed to consider in a rate decision the effect on railroad costs of an emergency board report issued during the pendency of the rate case. On that occasion, Mr. Aitchison also recalled, railroad counsel had recommended that the expected wage report be ignored.

Mr. Aronson suggested that there would be no basis for such criticism this time if the rate decision were issued before the 17th. He pointed out that the railroad evidence assumes that all employees will get the 10-cents-per-hour wage increase already awarded to the operating groups. The "non-ops" are demanding a basic wage increase of 25 cents per hour, a five-day week without reduction in their present six-day pay, and premium overtime rates for work on Saturdays, Sundays and holidays. In that connection, Mr. Aronson said that the rate case's further proceedings on the proposed permanent advance would permit consideration of any wage increases, beyond 10 cents an hour, resulting from the "non-op" demands.

Prompt Action "Best Solution"

Thus, the railroad counsel argued, a decision on the interim increase before December 17 offered the "best solution." That would be "pretty fast," Commissioner Aitchison suggested, pointing out that it would give the commission "only four working days" after the close of the argument. Mr. Aronson replied that he had "hoped" the commission would issue an order authorizing the interim increase immediately, even though the report on the matter were delayed.

Meanwhile, Mr. Aronson had argued in support of the railroad petition by addressing himself first to the allegation that no "emergency" confronts the carriers. He pointed out that the word "emergency" was not used in the interim-relief motion, but asserted nevertheless that an "emergency" situation had been shown by the evidence. He summarized that evidence, pointing up the figures which indicate that the 1949 return on net investment will be only 2.9 per cent on the basis of present rates. "If that," he said, "doesn't present an emergency that entitles us to the earliest possible relief, we've lost our case." The "discouraging" factor in the situation, Mr. Aronson also said, is that the railroads are doing "as poorly" as they now are with "approximately a record" peacetime volume of business.

He went on to assail protestant evidence which had compared the railroads' rate of return with the yield on government bonds and other securities. Such comparisons are invalid, Mr. Aronson insisted, because an industry in which a security holder has invested his money must earn much more than 3 or 4 per cent to give the security holder that basis of return. At the same time, he agreed with Commissioner Miller's suggestion that the railroad industry "perhaps never will get a fair return on any rate base that's been discussed." What is necessary, Mr. Aronson told the commissioner, is a return which will keep the industry "healthy," and attract new capital to it.

Commissioner Aitchison asked Mr. Aronson to explain why railroad petitions in general rate cases never ask for rate increases to cover the full revenue needs as shown by the evidence in such cases. Mr.

Aronson replied that the petitions are framed on the basis of many considerations, such as the prospective impact on the economy of the country, the opposition of shippers and government agencies, and possibilities of traffic losses to competing agencies. Whether the balance of those factors was "soundly determined" in the present case, he was unable to say; but he went on to advise Mr. Aitchison that the commission can fix the amount if it thinks the railroads should have more than they ask. Commissioner Miller asked if an increase of more than 13 per cent would be accepted; and Mr. Aronson replied that acceptance would depend on "how much" further than that the commission went.

When the railroad counsel added that the 13 per cent represents the "minimum" need, Commissioner Splawn asked whether the commission, if it authorizes such an increase, should then suspend railroad tariffs which do not take full advantage of the authorization or which eliminate the increases after they are made. Mr. Aronson replied in the negative, pointing out that the proceeding was a "revenue case" in which reductions "here and there" would not be inconsistent with the petition.

In closing his main argument, Mr. Aronson pointed out that there was no way to make a freight rate increase retroactive, and asserted that delayed action on the interim-relief motion would amount to a "denial of justice." The basic question, he added, is who should pay today's costs—today's shippers who are using the service, or next year's shippers.

N.I.T. League Will "Wait and See"

The National Industrial Traffic League offered no evidence at the hearings before Division 2, its participation therein having been confined to cross-examination of railroad witnesses by its counsel, John S. Burchmore. At the oral argument, Mr. Burchmore explained that the position finally to be taken by the league will be determined by the facts developed in the further hearings on the permanent-increase proposal. As to the interim-increase proposal, Mr. Burchmore took the position that the carriers had not made a case for immediate relief, and suggested that the commission might well delay action on any interim increase until after the close of the further hearing.

Mr. Burchmore also outlined for the commission the position with respect to further general rate increases which was taken by the league at its recent meeting in New York. That position was one holding that rate increases were reaching the saturation point, and that emphasis should be shifted to increased efficiency of railroad operations as an offset for wage increases and advances in other costs.

Like Mr. Burchmore, F. G. Hamley, general solicitor of the National Association of Railroad and Utilities Commissioners, argued that the interim-increase motion should be denied—without prejudice to renewing it after the close of the further hearing on the permanent advance. Mr. Hamley suggested that such further hearing could be concluded by the end of February, 1949, and an interim increase, if found justified, made effective by March 15, 1949. There is "no urgency," he insisted, which would justify an interim increase in advance of full hearing.

When he went on to say that the railroads were "not even claiming" an emergency "in the sense that service will be impaired," Commissioner Mitchell asked if that were Mr. Hamley's idea of an emergency. The latter replied that he thought there must be some such showing before the commission would be justified in granting increases without "full hearing." He went on to say that the present situation is different from that presented last year when the interim increase was granted in Ex Parte 166. Then there was evidence of a "financial" emergency, but there is no such evidence in the present case, Mr. Hamley added.

On Passenger "Deficits"

When he proceeded to raise the question as to why freight shippers should be called upon to absorb passenger-service deficits, Commissioner Aitchison asked if the commission's formula for the apportionment of expenses between freight and passenger service should be revised. After some discussion of that matter with the commissioner, Mr. Hamley agreed to see if the state commissions had any suggestions for revision of the formula.

While appearing for the state commissioners' association, Mr. Hamley also represented the Iowa, Montana, New Mexico and Wyoming commissions individually. Other arguments on behalf of state regulatory bodies were made by H. S. Freas and John H. Carkin for the California, Idaho, Washington and Oregon commissions; and Frank P. Aughnay for the North Dakota commission. They opposed the proposed interim increase, as did W. M. Dyer, who spoke briefly for the Wichita (Kan.) Chamber of Commerce.

The position of the Department of Agriculture, as stated by its attorney, James K. Knudson, was one of "unqualified" opposition to any increase—either interim or permanent. He said that prices of agricultural commodities had recently turned downward, and expressed the hope that the downturn indicated an early death of the inflation threat. The commission, he added, should avoid making any contribution to a revival of inflationary trends.

As noted in last week's issue, Mr. Knudson had previously filed a motion asking the commission to require the submission of evidence as to the extent to which the railroads are providing the "adequate" and "efficient" service contemplated by the Interstate Commerce Act. Other opposition arguments were made on behalf of agricultural interests by Walter Hoffman who represented California shippers of deciduous fruits, and M. W. Wells who represented Florida shippers of citrus fruits and vegetables.

Sees Only 5.2 Per Cent Needed

For the American Paper and Pulp Association, Wilbur La Roe, Jr., argued that the carriers would require only a 5.2 per cent rate advance to offset the increased expenses on which the plea for an interim increase of 8 per cent was based. Mr. La Roe also said that Mr. Aronson had talked about railroad needs for funds to improve their plants—not about an "emergency." For the Southern Traffic League, the Southern Hardwood Traffic Association, the Property Owners' Committee of coal operators, and the Associated Cooperage Industry, J. V. Norman argued that the

commission could not arrive at a finding of "emergency" except by "assumptions which are not justified." Thus, he asserted that there is "no emergency," and the interim-relief motion should be denied. Mr. Norman also said that coal and lumber prices were softening, and that those commodities could not stand further rate increases.

Parker McCollester, who opposed any interim increase as counsel for the Associated Industries of New York, the U. S. Brewers Foundation and a group of automobile manufacturers also represented the James McWilliams Blue Line, a water carrier engaged in the transportation of coal in Atlantic coastwise service. For the latter, Mr. McCollester asked that any increases authorized on coal moving to New England ports be the same whether any movement beyond those ports was by rail or by water.

Mr. McCollester's clients among the automobile manufacturers are those who ship principally from the Detroit, Mich., area and do not have decentralized assembly-plant set-ups like the General Motors Corporation and the Ford Motor Company. For these clients he asked that the commission refuse to grant any increase on a percentage basis so long as the railroads maintain the present relationship between rates from primary manufacturing points and those from assembly points. Previously Division 2 had received from Mr. McCollester a motion to deny the interim increase on the basis of a finding that the railroads had not "on their own evidence" made out a case for interim relief.

Another motion before the commission is that asking the commission to investigate the effect of "featherbed" working rules on railroad operating costs. It was filed by A. G. T. Moore, traffic manager of the Southern Pine Association, who devoted part of his argument to its support. Mr. Moore contended that the reference to fair wages and equitable working conditions in the Interstate Commerce Act's declaration of policy was a call for conditions fair and equitable to the shipping public as well as to railroad labor. Recalling that he had previously urged the commission not to become a "rubber stamp" for labor agencies of the government, Mr. Moore expressed his hope that the commission would this time put its heel "on these quickies . . . once and for all."

Finds Burden Unevenly Distributed

Still another argument based on a previously submitted motion was that of L. F. Orr, counsel for the Dairy Industry Committee, whose motion called for a broadening of the proceeding to bring into issue divisions of joint rates and the reasonableness of all increases in freight rates and charges that have been authorized or ordered during the postwar period. Mr. Orr's argument pointed up the highlights of a verified statement he had submitted to show, among other things, that "a large part of railroad traffic is not paying the full distributed cost of handling it and a considerable part of it is not even paying out-of-pocket costs." Mr. Orr's cost calculations were based on the cost studies made by the commission's staff and published as Senate Document 63 of the 78th Congress, 1st Session. They showed revenue "deficiencies" below fully distributed costs plus a 4 per cent return on investment in 63 commodity groups, ranging from 115.5 per cent for copper or to 1 per cent for products of mines, n.o.s. "Overages" with respect to other commodities ranged from 70.8 per cent for airplanes and parts to 0.1 per cent for scrap paper bags.

All dairy products were in the "overage" group while bituminous coal, coke, and iron ore were listed with "deficiencies" of 26.9, 25.5, and 69.7 per cent, respectively. An "overage" of 10.3 per cent was shown for anthracite coal. If the commission decided to give relief to railroads in the Eastern district, Mr. Orr said, this could be done by bringing the rates on coal, coke and iron ore up to their fully-distributed costs and requiring an adjustment of divisions of joint rates between eastern and Pocahontas roads. He calculated that the result would be an increase of about $397 million in the annual revenues of eastern roads. To support his contention that the commission had authority to require the divisions adjustment involved in his calculation, Mr. Orr cited the Supreme Court's opinion in New England Divisions case, 261 U. S. 184.

Who Fathered "Emergency"?

Counsel for various shippers of "products of mines," "animals and products," and "manufactures and miscellaneous" products contributed further argument in support of the contention that the railroads had failed to show that they were confronted with an "emergency." The former group included John F. Finerty, representing the Glass Container Manufacturers Institute and the American Zinc Institute, who "wisecracked" about what he considered to be Mr. Aronson's reluctance to admit that the railroads had fathered the "emergency" designation for their case. "Nothing short of a bastardy proceeding," Finerty said, "will get Mr. Aronson to acknowledge 'emergency' as a railroad offspring, but he's willing to adopt the child to establish its legitimacy."

Mr. Finerty went on to warn that the public "won't go on forever letting the railroads and labor saddle them with higher and higher rates." He predicted that the public would soon be demanding "pooling" arrangements or a return to the "recapture" plan.

Commissioner Mitchell asked if Mr. Finerty were charging that railroad managements and labor organizations were working in collusion on wage and rate increases. Mr. Finerty did not so charge, but he said he was "shocked" when President Ralph Budd of the Chicago, Burlington & Quincy testified that some engineers in passenger service were working "only two hours" for a day's pay; and that the railroads were "doing nothing but passing the cost on to the public."

Mr. Mitchell then asked what the railroads could do about such a situation; and Mr. Finerty replied that they could take a "firmer stand." To another question from the bench, as to what the commission could do, Mr. Finerty said it could call upon the railroads for "efficient and economical" operations. He then told Commissioner Patterson that he did not mean to imply that the carriers "as a whole" are inefficiently operated; but there are "some unwise expenditures on luxurious passenger trains and for wages under featherbed rules."

Among the counsel listed as representing shippers of

"manufactures and miscellaneous" products was J. B. Putnam, who spoke for 17 "independent steel companies." He asserted that the railroads have sought in this and other "revenue" cases of recent years to "circumvent" the Interstate Commerce Act's "fundamental requirements" calling for "just, reasonable and non-discriminatory" rates. Mr. Putnam called for a return to the consideration of rate proposals on the basis of those requirements. He also argued that the principal coal and ore roads were in prosperous condition, and required no rate increases on those commodities.

The Tennessee Valley Authority also qualified as a shipper of "manufactures and miscellaneous" products, its specific interest being the rates on fertilizer. However, its counsel, Robert Marquis, expressed its opposition to any interim increase. Commissioner Aitchison asked how T.V.A. had reached its conclusion that interim relief should be denied, and Mr. Marquis told him it had "studied the evidence" and considered the "general economic picture."

Commissioner Mitchell asked if T.V.A.'s study of the evidence had included consideration of a supplementary exhibit filed by Dr. Julius H. Parmelee, vice-president of the Association of American Railroads and director of its Bureau of Railway Economics, which showed the prospective 1949 earnings of 34 "representative Class I roads" with and without the 13 per cent increase proposed for permanent application. The exhibit showed that the New York Central would have a deficit of $23,953,000 in 1949 if the present basis of rates prevails throughout that year, and that its net income would become $34,328,000 if the 13 per cent advance were in effect. The respective figures for the Pennsylvania were shown as net incomes of $3,-332,000, and $64,217,000.

Mr. Mitchell said that the figures in the exhibit were enough to "scare anyone." Mr. Marquis said he had seen the exhibit, and went on to express his belief that the time has come for the commission to "insist" on a showing of economies in the operations of the railroads. When he was asked to indicate where economies might be sought, the T.V.A. counsel suggested that the matter of circuitous routing be looked into. Asked by Commissioner Patterson what T.V.A. would contribute to such an inquiry, Mr. Marquis replied that it could contribute nothing but examples of circuitous routes. "Nothing except talk," Commissioner Patterson then observed.

For the "Consumer"

Last to argue was Herbert Askwith, who said his plea was "for the consumer"—the "forgotten man in this case." Before he got very far, however, Commissioner Mitchell had brought out the fact that he is a public relations representative with corporation clients and the owner of stock in 13 railroads. Nevertheless, Mr. Askwith did not speak for any of his clients. On behalf of "the consumer," he urged the commission to deny the interim-increase motion and order an "interim decrease." He cited freight-rate increases of recent years as he called the commission the railroads' "Santa Claus"; and he asked the commission to tell the carriers this time that they "cannot get any more succor from their wet nurse."

In his rebuttal argument, Mr. Aronson undertook to answer various points made in the arguments of counsel for the protestants. He spent a considerable amount of time on his answer to arguments which contended that the carload freight shipper could not be called upon to bear the burden of deficits from passenger and l.c.l. services. Those making such arguments had relied on court decisions in cases wherein the North Dakota and West Virginia commissions had been overruled in attempts to fix rates on lignite coal and passenger fares, respectively, on bases lower than the costs of handling the traffic involved.

Mr. Aronson pointed out that those cases were decided before enactment of the Transportation Act of 1920 which added section 15a with its rate-making rule to the Interstate Commerce Act. He went on to cite court decisions which have held that the 1920 act put the railroads under the "fostering guardianship" of the commission; and he noted that the declaration of national transportation policy has also been added. Finally, Mr. Aronson cited several decisions wherein the commission has refused to subscribe to the proposition that, when the earnings from freight service are on a fair-return basis, it cannot authorize higher freight rates to bring up earnings of the railroad enterprise as a whole.

With respect to "featherbed" rules, Mr. Aronson said he would not contend that management was satisfied with present working rules. "That," he added, "is not the test. The test is that the law has set up procedures for the disposition of such controversies. The situation on the railroads is more the result of government tribunals determining the issues than in any other industry."

The American Locomotive Company's Centennial gift to the City of Schenectady was a 110-foot flagpole, dedicated to the memory of the community's war dead, at Veterans Memorial Park. Shown here at the base of the giant pole are, left to right, Mayor Owen M. Begley of Schenectady, who accepted the memorial on behalf of the citizens of his city; Mrs. Paul Lockwenz, New York State President of the Gold Star Mothers; and Robert B. McColl, Alco president

The relocated line at Cedar Lake is of modern heavy-duty construction. At the ribbon-cutting ceremony that officially opened the new line to traffic are, left to right: F. C. Berghaus, vice-president—operation, Monon; Earl C. Martin, assistant to traffic manager, International Harvester Company; Mrs. Martin; John W. Barriger, president, Monon; Mrs. Oscar Ahlgren, Whiting, Ind., who has traveled 100,000 mi. on the Monon; and Warren W. Brown, vice-president—traffic, Monon. Mr. and Mrs. Martin are residents of Cedar Lake

LINE CHANGE "CURES" WEAK POINT ON MONON

Four-mile relocation to higher ground by-passes 40-year-old trestle across quicksand bog; gives more favorable grades and curvatures

arked by a ribbon-cutting ceremony viewed by a large group of local townspeople and special guests of the railroad, a section of relocated line, slightly less than four miles long, which cost approximately $400,000 to build, was placed in service by the Chicago, Indianapolis & Louisville at Cedar Lake, Ind., on November 30. To attend the event about 130 guests, including shippers, bankers, representatives of other roads, and members of the press, were transported to Cedar Lake from Chicago in cars attached to the Monon's "Tippecanoe," and later were returned in the same cars attached to the northbound train of the same name.

Cedar Lake is about 40 mi. south of Chicago on the main line of the Monon. Formerly the line extended along the west shore of Cedar lake, passing through the town of the same name, and was carried across a quicksand bog immediately south of the town on a timber trestle 962 ft. long, which was 40 years old. Known as the Paisley trestle, this bridge was considered the weakest point on the entire road. The piles of the trestle were driven 90 ft. into the bog without encountering a solid footing, and because of the age of the structure and the unstable character of the supporting subsoil, speeds over it were rigidly restricted. The trestle was in need of immediate replacement.

A relocation of the line in the vicinity of the lake completely solved the problem created by the trestle and the quicksand bog. Situated west of the old line, the new alinement is located on higher ground, avoiding the bog, and making possible a route of easier grades and curvature. Having a length of 3.84 mi., practically the same as the old route, the relocated line has a maximum grade of 0.24 per cent as against 0.48 per cent for the old line. It has three curves having a maximum curvature of 1 deg., compared with seven curves with a 3-deg. maximum on the old line. The total central angle was reduced from 121 deg. 18 min., to 87 deg. 7 min.

Built to modern heavy-duty standards of construction, the relocated line consists of 112-lb. rail, six-hole joint bars, double-shoulder tie plates, creosoted ties, and an ample section of crushed-stone ballast. Improved Fair rail anchors are used, which are placed in accordance with the group system. In constructing the relocated line about 14 corrugated metal culverts were installed, some of which have vertical inlet pipes at the upstream ends.

Aside from the elimination of the Paisley trestle, construction of the relocated line also does away with a hazard to public safety that formerly existed because people of the community used the old track and right-of-way as a thoroughfare to beaches and piers along the shore of the lake. As part of the project a new passenger station is to be constructed to serve the community of Cedar Lake.

The relocated line was built under the general supervision of L. F. Racine, chief engineer of the Monon. The grading and the construction of the substructure for a highway underpass were done by the Strom Construction Company, Gary, Ind. The American Bridge Company furnished and erected the steel for the underpass, and the Kershaw Company, Montgomery, Ala., did the track work, including the ballasting.

MODERNIZATION OF HANDLING METHODS AT FREIGHTHOUSES

Committee urges railroads to choose equipment for mechanization of freight stations with great care to attain maximum benefits; its selection is a job for specialists

Progress in materials-handling depends less on the development of its technical aspects than on the development of organizations for the effective application of the best principles and practices of good freight handling. Improvement must come about through a reduction in the time and energy spent in the physical handling of freight and the related clerical work. To achieve the best results, planning must precede actual operation; it must start at the time a shipment is received by the pick-up truck from the shipper, or at the receiving station. Keeping shipments together in a pick-up truck or a feeder car, for example, will facilitate the initial transfer of the freight, and, in turn, simplify the distribution of the freight through the processes it must undergo to reach its destination. Each process has an effect on the one following. If there is inefficiency somewhere along the line, the effect will be cumulative.

All-important as are the station facilities and handling equipment, the following are prerequisite to economical operation:

(1) Employee training program, so that workers will understand their responsibilities.

(2) Supervision, adequate in capacity and number.

(3) Running analyses of tonnage and efficient spot clerk procedure.

(4) Flexibility of gang make-up and distribution, to avoid non-productive man-hours and to meet varying conditions throughout the work day.

(5) Adequate stevedoring forces, to avoid congestion and bottlenecks.

(6) Proper balance between loss-and-damage prevention factors and the need to reduce freight-handling costs.

This article is from a report presented at the 52nd annual convention of the Association of American Railroad Superintendents by a committee of which W. J. Silich, manager of station service of the Delaware, Lackawanna & Western, New York, was chairman, and from the discussion which followed its presentation.

Below—Trailer-tractor operations produce good results where freighthouse platforms are wide. Left—Fork-lift trucks and pallets answer the need where "stacking" is desirable

It is generally recognized that there are relatively few modern freighthouses in the country. Many will not permit efficient mechanized operations without major changes in physical layout. Efficient use of mechanized equipment is further deterred at many points by a poor supply of labor; the sub-standard quality of that which is available, and its rapid turnover. Subordinate supervision is not meeting prewar standards. The conscientious supervisor is weary from the pressure which attended the accomplishment of his work during the past seven years. The less conscientious supervisor rides along with the tide, and sometimes, where his job comes under the scope of union agreements, he is satisfied to draw a balance between a mistaken idea of what is advantageous to the men and what he must show in results to management.

Requisites for Maximum Efficiency

Many advantages will accrue if modern materials-handling methods are adapted to freight station operations. However, maximum efficiency can be expected only if:

(1) The physical layout at the particular station allows efficient utilization of mechanized equipment—i. e., plenty of aisle room, good flooring and plenty of lighting.

(2) The supervision and other personnel involved are thoroughly briefed in the principles and procedures to be followed.

(3) Personnel are thoroughly trained in the use of the equipment.

(4) An adequate equipment and plant maintenance program is established.

In instances where these factors have not been thoroughly considered, equipment has been purchased and turned over to freight agents who have had to try to work it into their operations in the face of difficulties and misunderstanding. In such cases the new equipment fails to produce anticipated results and mechanization gets a "black eye."

Generally speaking, the following types of equipment are now available and in use at freighthouses: Two-wheel hand trucks; tractors and trailers; low-lift platform trucks and live skids; fork-lift trucks and pallets; mechanical platforms, or burden-carrying, trucks; semi-live skids and jacks; and miscellaneous equipment (such as cranes, portable conveyors, containers of all types, rebo racks, and dollies).

In the selection of equipment, a thorough knowledge of the everyday procedure is essential, and primary consideration must be given to the physical layout of the station. The freight agent and the general foreman should be consulted and due weight given their views.

The maintenance and distribution of equipment should be planned. A thorough and detailed analysis of all of the facts involved should disclose what equipment is best suited and the most effective method of using it. In making comparisons of the estimated cost of handling freight with proposed equipment as against existing operations, allowance should be made for the initial cost of the mechanical equipment, plus depreciation, fuel, lubrication, and maintenance costs.

Once equipment is selected, it is worthwhile to assign a competent empolyee to the operation continuously until such time as it is functioning as intended and the local employees are thoroughly trained in its proper use.

The principle that economy in the handling of freight is improved as the size of the handling unit is increased is sound, provided due consideration is given the overall time factor. It is important to realize that time consumed at the point where the mechanical unit is loaded and unloaded is vital. A considerable portion of freighthouse labor is involved in these two operations, and a careful study must be made to determine how their functions are affected by the size of the mechanized unit and its flexibility. Despite the fact that the less the handling, the less is the labor expense, it is important to keep the equipment and its operation from

New facilities with roof supports at the edges of the platforms and with good flooring permit efficient use of mechanized equipment

becoming so unwieldly as to create bottlenecks and destroy flexibility.

It is difficult to draw comparisons between types of equipment. So many variable factors are involved that it is imprudent to say, in generalization, which is superior. Choice depends on the facility, the type of freight handled, and other circumstances at the particular station.

Selection of Equipment

Where there are long hauls in a large facility and where station islands and platforms are wide enough to accommodate tractors and trailers without congestion, this operation will produce maximum results. Where stacking is involved in addition to moving the material, fork-lift trucks and pallets are the answer. Where the facility is medium-size, and islands and platforms are of fair width, low-lift platform trucks and live skids, or motorized platform trucks give a satisfactory performance.

Where the facilities are outmoded, platforms and islands narrow, and running distances not too long, the hand truck or semi-live skid and jack will probably continue to do a better job than any mechanized equipment now on the market.

Progress in freight handling seems to be delayed mainly because of hesitancy in making large capital expenditures for new freighthouse facilities in the face of the uncertainty as to the future tonnage of l. c. l. traffic, and the relationship between l. c. l. revenues and costs. It is a common practice to write off the cost of mechanical equipment with labor savings accruing during the first or second year after installation. While this is understandable, it must be recognized that, in many instances, this procedure is contrary to the principle of obsolescence. If the freighthouse facility is obsolete in its physical characteristics, no amount of pressure should influence the prudent officer to recommend completely mechanizing its operations. Instead, the probable savings through the use of a *new* facility *designed* for mechanized freight handling should be investigated.

Freighthouse Design

Conditions permitting, basic factors which should be adhered to in the design of freighthouse facilities are: (1) driveways of sufficient width to accommodate modern highway vehicles; (2) inbound house of sufficient width to permit adequate zoning of freight by locations (60 ft. being generally considered satisfactory) keeping the freight "on wheels"—either through the medium of pallets or live skids, rebo racks, semi-live skids or similar contrivances to avoid the necessity for rehandling; (3) apron or island platforms of sufficient width to permit free flow of mechanized equipment—the minimum for islands being 24 ft.—with roof sup-

Expansion is limited in many freight stations by the intensive development around them

Driveways of sufficient width to accommodate modern highway vehicles speed operations

ports on the edges on the platform; (4) track layouts giving an island between each set of two tracks, so that all cars can be worked without passing through other cars; (5) outbound house wide enough to afford room for unloading and distributing freight from trucks, yet narrow enough to avoid excessive running distances between trucks and cars (40 ft. being generally satisfactory); and (6) two-way communications, with outlets to cover the station and platform areas.

Large freighthouses should have lift-bridges between the house proper and the island platforms, so located that the tracks are spanned with minimum travel distance.

Each railroad should have an organization dealing specifically with the study of materials handling. This is a job for specialists. Without the unity of centralization, each division or station will install its own ideas, whereas centralized control will reduce confusion and waste effort in the evolution of better freight-handling methods. A materials-handling department is best qualified to make detailed cost and practice studies, although it should, by all means, collaborate and reach agreement with the division and station forces before making positive recommendations. To find the answers to our freight-handling problems more quickly, the job must be turned over to men best qualified by knowledge and experience. They must be given the time and authority to see the job through—it must not be passed to officers and supervisors already burdened with the multiplicity of everyday railroading functions.

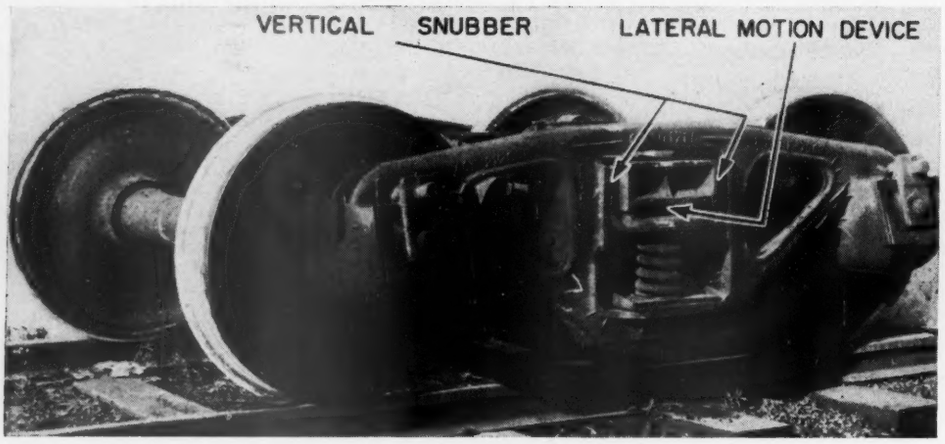
Discussion from the Floor

Answering a question from the floor as to how much tonnage he thought was required to justify mechanized handling, Chairman Silich said that any station using six or more men could use some mechanical units with enough savings to pay for the equipment within a reasonable time. He expressed the opinion that it was a mistake to concentrate only on large stations. In this connection, C. S. Hill, superintendent of stations and motor service of the New York Central, New York, stated that savings in manpower, and reduction in personal injuries and damage to freight, had been experienced at Little Falls, N. Y., after a 4,000-lb. capacity fork-lift had been assigned to that station, even though the equipment was in use only about 3 hr. a day. Despite the low utilization, the mechanized unit justified itself because the station loaded a considerable amount of heavy machinery moving in l. c. l. service.

Mr. Hill described the interchange of pallets with shippers at an upstate New York station. Shipments on pallets are loaded directly onto delivery trucks and the shippers return the pallets on outbound shipments. Besides creating a better service, handling has been lessened, with a consequent reduction in loss and damage to freight and in over-and-short shipment. "If we can interest the public in pallet movement to and from the freighthouse," Mr. Hill said, "we will achieve important improvements in service and reductions in cost."

W. G. Miller, freight agent of the Pennsylvania, Chicago, warned that one or two pieces of freight-handling equipment in a large station would not necessarily show favorable results; that it is necessary to buy the right type of equipment for each job, and in sufficient quantity. Mr. Miller thought it best to have somewhat varied equipment; for example one or two fork-lifts of 2,000, 4,000 and 6,000-lb. capacity, rather than a large number of standardized units, so that equipment will be available for the various jobs to be performed.

Chairman Silich said that there is need for a low-cost platform lift truck—about $1,500. Such a unit, he said, would increase the flexibility of operations as it would permit loading freight on other equipment, such as live skids, while tractor equipment moved the freight from point to point. This would avoid tying up the lift equipment in work other than loading and unloading freight.



The Type S-1-L truck of the Standard Car Truck Company with vertical snubbers and Barber lateral-motion device

PROTECTING THE LADING AND THE CARS

The story behind the box cars for "Pacemaker" service on the New York Central—Comparative tests of five trucks for high-speed service and an A.A.R. standard type

By
P. W. KIEFER, chief engineer of motive power and rolling stock,
A. M. MIERS, assistant engineer, and
L. D. HAYS, air brake engineer, New York Central system

The principal betterments incorporated in the box cars for the New York Central's "Pacemaker" service consist of progressively improved trucks for protection against the lateral and vertical shocks of operation; high-speed pneumatic brake equipment combined with non-load-compensating rigging for the higher braking ratio, and a double-acting cushioning device [Waughmat] installed back of the couplers.

Trucks

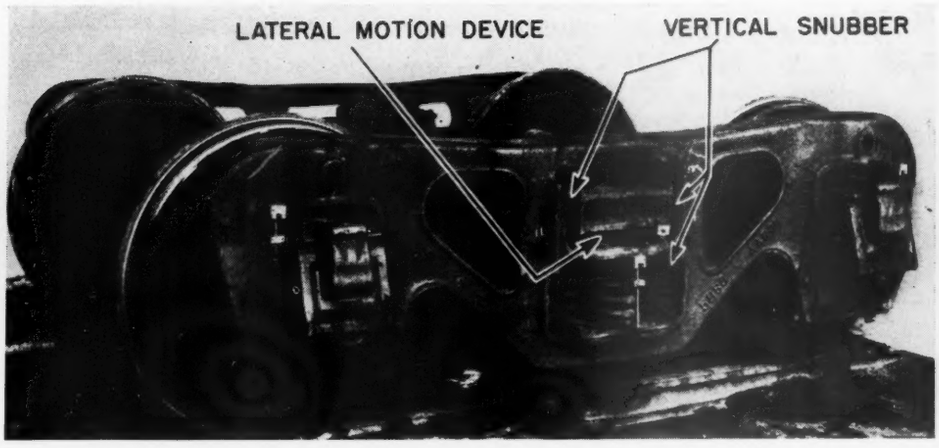
The car bodies, themselves, are of the Association of American Railroads standard design, carbon-steel riveted, which, for this form of structure, is the best yet produced for interchange service. For the past decade no comprehensive or conclusive studies have been made for the establishment of an improved A.A.R. standard construction, with due regard for materials, methods of fabrication, and the use of approved competitive and fully interchangeable features, such as doors, ends, roofs, and other items. A number of the fundamental features of the present A.A.R. standard design, however, are used in all of the high-tensile low-alloy steel, welded or otherwise, box-car body constructions offered by the different builders during recent years.

Conventional Spring-Plankless with Unit Snubbers—This integral box, non-lateral-motion spring-plankless truck is generally representative of the designs extensively used in regular interchange freight service. It is not installed under any of the "Pacemaker" cars, but is included in the performance results to be presented later as the base from which subsequent progress has been advanced.

The suspension springs are of the 1936 A.A.R. design for 40-ton nominal capacity cars, consisting of three outer coils and one inner coil having a free solid travel of 1⅝ in. A typical friction snubber is contained in each spring group. Relative lateral movement between bolster and side frames is limited approximately to 1/16 in. each side of center position. The wheelbase length is 5 ft. 6 in. and the weight per truck, fully equipped, is 7,000 lb.

Standard Car Truck Company Type S-1-L—This integral-box, spring-plank truck with lateral-motion bolster has bolster suspension springs made to suit a 50,000-lb. maximum revenue load and free-to-solid travel is 2⅛ in. Vertical snubbing is accomplished by means of the Barber stabilizer, consisting of spring-actuated friction shoes at each side of the bolster with liners on the contact surfaces of the side-frame columns. The lateral-motion bolster, having 1⅛-in. relative movement each side of center, is positioned on rollers of suitable material which function between contour surfaces on the underside of the bolster and on spring-

The paper from which this article is condensed was presented at the annual meeting of the American Society of Mechanical Engineers held at New York, November 28 to December 3, 1948, as a contribution of the Railroad Division.



The Type S-1-L-P truck of the Standard Car Truck Company is identical with the Type S-1-L except for the use of pedestal-type side frames

seat members supported on the suspension springs. The weight of this truck, with 5 ft. 6 in. wheelbase, is 7,500 lb. each, completely equipped.

Standard Car Truck Company Type S-1-L-P—All details of this truck are identical to the Type S-1-L, except for the use of the pedestal type side frame with coil springs over the separate boxes and for the resulting increased length of wheelbase. Here, again, suspension spring capacity for a maximum revenue load of 50,000 lb. is provided. Total free-to-solid travel is 4-11/16 in., divided 2-9/16 in. for the pedestal springs and 2⅛ in. for the bolster springs. The weight of this truck, complete, is 8,900 lb. The wheelbase is 5 ft. 10 in.

Symington-Gould Type XL—Both vertical and lateral cushioning of this pedestal-type spring-plankless truck, with controlling means, are incorporated entirely at the journal boxes. Suspension springs here used are of a capacity suitable for 50,000 lb. maximum revenue load and have free-to-solid travel of 3-13/16 in. as tested. Later this was changed to 4 in. The journal boxes are provided with longitudinally extending wings at the bottom which serve as seats for two suspension springs. Relative lateral movement between the side frame and journal box each side of center position is ⅝ in. Vertical and lateral snubbing is accomplished through spring-actuated friction shoes at each side of the journal boxes which operated on linered surfaces within the frame pedestals. Truck-frame unsquaring is prevented by means of an interlock between bolster and side frame, which also permits rocking of the side frame in a vertical plane for assistance in wheel-load equalization. The weight of this truck, with complete equipment, is 8,100 lb. The wheelbase is 5 ft. 6 in.

Chrysler Design—Symington-Gould Type FR-5D—This truck was designed by the engineers of the Chrysler Corporation on fundamental requirements supplied by the railroad engineers and has been further refined in detail cooperatively by Chrysler and Symington-Gould. For lateral cushioning, an arrangement of relatively short swing hangers, pivoted below the axle center to provide side-frame stability, is incorporated in the integral box-type side frame and confined within the lower center-frame members for protection against possible failures. A spring plank prevents truck-frame unsquaring by means of special contour bearings between it and the swing hangers. Suspension springs used are made suitable for 50,000 lb. maximum revenue load, with free-to-solid travel of 3⅞ in. and are controlled by external snubbers equipped with composition lining on the friction shoes. Relative lateral movement between bolster and frame, each side of center position, is 1¼ in. Relative lateral movement between bolster and plank under lateral deflection of the supporting springs is limited to 5/16 in. The weight of this truck, fully equipped, is 7,900 lb. The wheelbase is 5 ft. 6 in.

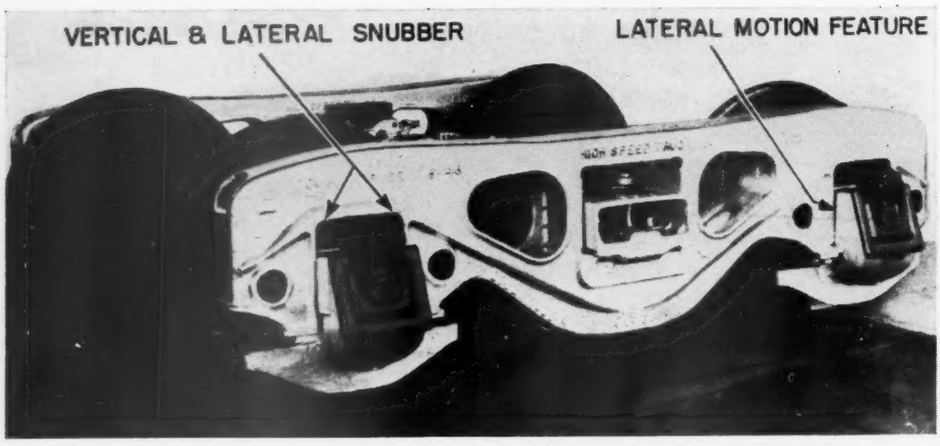
Brake Equipment

The present standard AB brake for freight cars, adopted in 1933, was developed primarily to meet the demands for improved control of train slack action during braking of heavier and longer trains. For the "Pacemaker" box cars, new conditions were to be met and it was realized that the pneumatic brakes and associated rigging of these units would have to be such as to meet satisfactorily the requirements within available signaling and yet to be suitable for operation in regular freight trains when desired.

The problem was presented to the air-brake manufacturers with whom the railroad continued to cooperate so as to obtain what was needed, and, following a period exceeding two years of intensive effort, this work resulted in the development of the high-speed freight brake known as the AB-1-B, based on the standard AB equipment.

With this brake, when set for high-speed service, the development of brake-cylinder pressure during service-brake applications is the same as for the AB equipment, except that a safety valve is connected to the brake cylinder which limits a full-service application to 60 lb. cylinder pressure. When an emergency application takes place, this safety valve is isolated from the brake cylinder, thereby permitting the cylinder pressure to reach its full equalization value of 95 lb. with brake-pipe pressure at 110 lb. This arrangement provides a large spread of braking force between full-service and emergency brake applications, the same as with passenger-train brakes, rather than the difference of about 20 per cent available in regular freight operations.

During an emergency brake application, when set



The Symington-Gould Type XL pedestal truck

for high-speed service, the development of brake-cylinder pressure is direct and not in three stages as is the case with the standard AB equipment, but when operating in regular freight trains where no signal-pipe air pressure is available, the AB-1-B control valve is automatically adjusted to provide the three-stage build-up of cylinder pressure.

The foundation-brake rigging of the "Pacemaker" cars is of the single-shoe non-load-compensating type, but of sufficient strength for the braking ratios of 90 and 140 per cent of the car light weight for full-service and emergency applications, respectively.

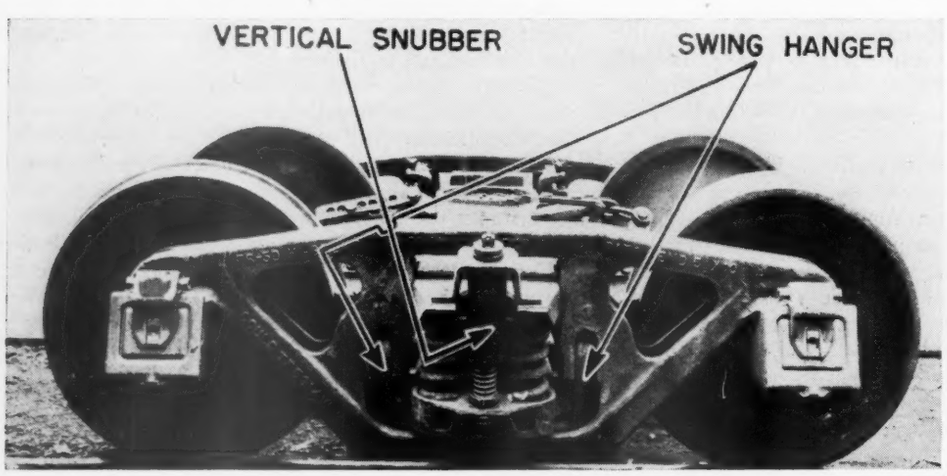
During the early design stages of the "Pacemaker" box cars it was estimated that signal spacing then existing between New York and Buffalo was such as to permit maximum load stenciling of 50,000 lb. per car with a speed limit of about 65 m.p.h. As soon as trains of these cars became available, stop-distance checks were made which confirmed the previously developed calculations and also indicated a maximum train length of about 65 cars. At the same time it was established during these checks that with the type of double-acting cushioning devices used in the connections of these cars excessive shock action would not develop under conditions of low-speed emergency braking and that, under normal braking practices from all speeds, the related train action was exceptionally smooth.

During experience to date with the type of high-class merchandise lading handled in the "Pacemaker" trains, the load per car has ranged from 8 to 15 tons and, on the average, about three-quarters of the cubical capacity has been used. From this it follows that the actual braking situation is more favorable than indicated and that a speed limit up to approximately 70 m.p.h. is available under the present operating set-up, if the need therefor should arise.

Car Connections

The double-acting cushioning device installed back of the couplers, known as the Twin Cushion, consists of a series of synthetic- or natural-rubber rings or pads bonded through openings in a steel plate. In each assembly the rubber-spring units, separated by flat divider plates, are installed in two groups, one for pull enclosed in the coupler yoke and the other for buff, with both placed under sufficient precompression to produce the desired travel and load characteristics.

The purpose here is the substitution of cushioned resiliency for free slack in either direction of coupler movement, with total car-connection slack reduced to



The Symington-Gould Type FR-5D truck of Chrysler design

the extent possible when the standard automatic coupler is used. This is especially helpful while braking or otherwise decelerating, and similar advantages also are made manifest while starting, accelerating and running and during any reversal of coupler load.

One of the car-connection features here incorporated which contributes importantly to the highly desirable reduction in free slack and protection against pulled-out couplers consists of the pin-type connection between coupler shank and yoke. This assembly, or its equivalent, is far superior to the cross-key arrangement—long obsolete in the writers' opinion—as used on the great majority of revenue freight cars and, although established as an A.A.R. Alternate Standard and applicable to the yoke used with any authorized friction draft gear as well as to that of the cushioning device here described, it is frequently ruled out for new cars because of relatively small additional first cost. This is a short-sighted policy.

As the result of close cooperative work by the A.A.R. Committee on Couplers and Draft Gears and the Mechanical Committee of the Standard Coupler Manufacturers, the principle of the tight-lock coupler now is made available for freight operations and the work has been advanced to the stage where trial applications have been made, under A.A.R. sponsorship, to three Pennsylvania special-service box cars, with additional installations scheduled for three New York Central System interchange freight cars of a type not yet selected. In due time others are to follow.

Through the aid of experience with the A.A.R. passenger-service tight-lock coupler it was found possible to design the shank and attachments in such a manner as to make the new design applicable to existing freight cars of conventional construction, substituting only a striking casting to accommodate the necessary spring-supported carrier where the latter is not already in use. The interlocking wings are similar to those of the passenger tight-lock coupler so that they may be coupled together. The anti-creep, lock-set and knuckle throw are the same for both couplers. Machine finishing has been dispensed with and the normal free slack per pair of couplers has been reduced to 3/8 in., which is approximately one-half the amount present with the standard Type E.

In the event that this or subsequently modified designs prove practical for freight cars at reasonable cost, this further reduction in free slack, with correspondingly bettered control of the surges between freight cars, may be accomplished as an additional step in the desired direction.

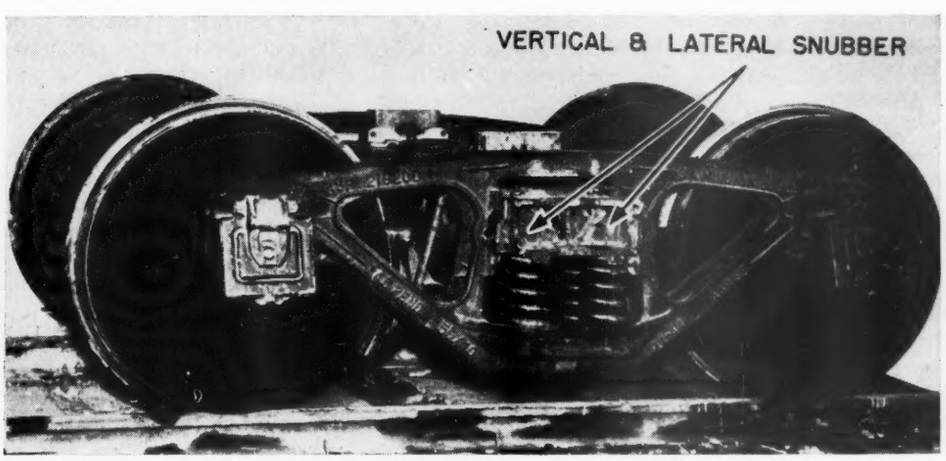
Comparative Operating Tests

For realistic checks of the results obtained from the truck development and design work already described, a series of road tests have been progressed over the past two and one-half years in which special trains having consists made up substantially of a baggage car, two 50-ton steel-sheathed box cars equipped with instruments, and a coach, hauled by a 4-6-4 passenger locomotive of ample capacity, have been used over the same trackage in all cases. Each individual run consisted of an eastbound and a westbound movement of 57.5 miles over good main-line double-track rock-ballasted roadbed and rail ranging from 118 lb. to 131 lb. per yard, with numerous intermittent curves and tangents.

The two instrument cars, operated in each run, are of identical construction. The recording equipment and the manner in which it functions in this type of work is of first importance.

Each test car is fitted with four vertical accelerometers located at the center of the floor space and set, respectively, from experience for .25, .35, .50 and .75 values of gravity. The lateral accelerometer settings are .20, .30, .40, .50 and .60 values of gravity, respectively for the fine pendulum weights per instrument. The instruments are mounted in oil-damped pendulum bases of special design which serve the essential dual purpose of maintaining constant calibrations, regardless of car-floor unleveling when negotiating curves or from other causes and nullifying the effects of centrifugal forces on the pendulum weight elements. One of these devices is positioned over the bolster at the trailing end of each test car. Thus, with the two designs of instruments used, continuous records are obtained, for each design of truck tested, of the vertical and lateral accelerations of operation as registered simultaneously in terms of gravity within the car bodies when operating over curves or tangents.

The revenue load of 25,000 lb. has proved adequate



American Steel Foundries Type A-3 truck with vertical and lateral snubbers

COMPARATIVE ROAD-TEST RESULTS WITH HIGH-SPEED FREIGHT-CAR TRUCKS

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5
Date of test	Sept. 17, 1946	June 19, 1946	Nov. 19, 1947	July 23, 1948	July 30, 1948
Max. speed, m.p.h.:					
Eastward	75	77	65	75	81
Westward	78	82	83	82	86
Average speed, m.p.h.:					
Eastward	63.1	51.6	55.6	53.7	62.5
Westward	61.5	62.3	65.2	62.8	58.6
Lading, lb.	25,000	25,000	25,000	25,000	25,000
Capacity of springs, revenue load, lb.	80,000	50,000	50,000	50,000	50,000
Truck designs	Conven. spring-plankless, unit snubbers	Barber S-1-L-P	Symington-Gould XL	Chrysler design FR-5C. S.-G.	Barber S-1-L	Chrysler design FR-5D. S.-G.	A.S.F. A-3	Chrysler design FR-5D. S.-G.	A.S.F. A-3
Max. lateral movement each side of center, in.	1/16	1-1/8	5/8	1-1/4	1-1/8	1-1/4	1/4	1-1/4	1/4
Total spring deflection, free-to-solid, in.	1-5/8	4-11/16	3-13/16	3-13/16	2-1/8	3-7/8	3-11/16	3-7/8	3-11/16
Average loaded spring height, in.	7.81	8.42-7.47*	7.04	8.33	7.36	8.43	8.56	8.47	8.56
Average spring deflection loaded car at rest, in.	0.44	1.03-0.78*	1.98	2.05	0.83	2.08	1.69	2.04	1.69
Vertical lading-damage factor:									
Total	5,447	520	184	189	3,488	126	3,629	349	1,605
Eastward	2,553	141	29	36	509	37	1,262	121	712
Westward	2,894	379	155	153	2,979	89	2,367	228	893
Lateral lading-damage factor:									
Total	32,094	3,174	1,335	197	3,021	1,380	3,240	466	4,039
Eastward	19,099	1,061	560	19	914	416	1,582	185	1,492
Westward	12,995	2,113	775	178	2,107	964	1,658	281	2,547
Now used in "Pacemaker" merchandise trains	No	Yes	Yes	Yes	Yes	Yes	No	Yes	No

Note: Cast steel wheels 33 in. diameter, groundtreads.
*At pedestal and bolster, respectively.

in actual service because only occasionally has the l. c. l. lading per car exceeded this figure by a small amount. The resulting load on the rail is 73,000 lb.

The American Steel Foundries Type A-3 integral-box, spring-plankless truck was installed under the instrumented cars for test purposes. Similar runs with higher capacity springs have been made therewith, but no test performance information for this truck had been developed under the instrumentation when using springs of designs and capacities suitable for the "Pacemaker" l. c. l. merchandise loading. The bolster-supporting springs used have free-to-solid travel of 3-11/16 in. and capacity suitable for maximum lading of 50,000 lb. Vertical and lateral snubbing is effected by means of a spring-actuated shoe arrangement at each side of the bolster which moves against linered surfaces of the side-frame columns. Relative movement between bolster and side frame, each side of center position, is ¼ in. Wheelbase length is 5 ft. 6 in. and the weight per truck, fully equipped, is 7,100 lb.

Although not used in the "Pacemaker" trains, a total of 4,200 New York Central System regular box and hopper cars are equipped with this truck, sprung for maximum A.A.R. rail loading.

Test Results

The table has been prepared to show representative results from this series of comparative tests. It is noted that truck performance, both lateral and vertical, is expressed in terms of "lading-damage factor units." This is a method of evaluation in which relative values are assigned to the acceleration counts of the various magnitudes in proportion to the square of the acceleration intensity. The observed number of counts of each acceleration intensity is multiplied by the corresponding weighting factor and all of the weighted counts are added together. This method was developed in 1933 by a subcommittee of the A.A.R. Committee on Car Construction and has since been used, where applicable, in road tests conducted under the sponsorship of the A.A.R., Mechanical Division, as well as by various railroads and truck manufacturers.

The runs here set forth were not selected from the best performances, but were chosen so as to provide representative results in a condensed form not requiring prolonged study or laborious analyses but, withal, consistent with the large amount of similarly developed data accumulated for the Barber Type S-1-L and Type S-1-L-P trucks, the Symington-Gould Type XL, and the Chrysler design Type FR-5D.

The lateral performance of the Chrysler truck, shown in Column 4 of the table, is the least favorable produced with this design, including the results of certain tests made with springs for 100,000 lb. instead of for 50,000 lb. maximum lading. This applies, likewise, to Column 5 for vertical action of the same truck in the runs made with the 50,000-lb. springs.

With the vertical accelerometers centrally positioned over the underframe, which, in turn, is supported at the truck center plates, it is recognized that because of a certain amount of flexibility in the steel bodies of the test cars, the action of this instrument is moderated, while at the body bolster, where the lateral accelerometer is placed, there is little, if any, transverse car-body flexibility. At the same time attention is called to the fact that the counter of each vertical accelerometer registers only when the relative motion

of the weight amounts to 0.005 in., whereas, with the lateral accelerometer, the movement must be 0.010 in., or twice as much, before a count is recorded.

The influence of speed in terms of the correspondingly ascending dynamic force reactions with the different trucks is evident. For the most part, a quite definite relationship is shown between the magnitudes of the vertical force reactions and the amounts of controlled bolster-spring-suspension travels used.

On the effects of restricted bolster-spring-suspension travel of the Barber Type S-1-L truck, Column 3, with respect to vertical performance, it is in fairness stated that, since made available for the "Pacemaker" cars, designs of this truck have been produced incorporating springs of longer travel with which, unquestionably, vertical accelerations lower than those shown would be obtained.

Improved Instrumentation Needed

Thus far, in the experience of the writers, none of the procedures employed with instruments of the accelerometer type produce data from which may be derived the *ratio* or the directly comparable values of these two disturbances, as transmitted to the car body through the trucks under test. This deficiency should not be disregarded by the equipment engineers of the railroads and the manufacturers, but, instead, it should be the subject of constant and active study for a positive determination of the adjustments necessary in the records, as presently made with soundly based instruments, or through some other approach, to accomplish the equating of these two values on a reliable basis.

With this knowledge at hand, no longer would it be necessary to rely on speculation as to the relative importance of lateral vs. vertical shocks of freight-car operation, and to leave unanswered the question as to which of these two lading- and equipment-disturbing influences may be most in need of reduction in a given case for a closer approach to shock-free movement of freight trains, especially for those operating on high-speed schedules. For the most part, until very recently, this question has been passed over by the railroads and the manufacturers, and the equipment engineers of both industries now should take the action here proposed, which is indispensable in any advanced examination of freight-car and train efficiency.

There is still another matter pertaining to this subject of instrumentation which is in urgent need of attention. To date, in the use of companion test cars equipped with accelerometer-type instruments of different kinds, little or no opportunity has been afforded to accumulate in the results to be studied the recorded relative magnitudes and characteristics of longitudinal disturbances and shocks. Instruments designed to obtain such data should be made available for use in trains of some length when made up, in whole or in part, of cars having improved features for the establishment of comparative evaluations among the lateral, vertical and longitudinal force reactions of car and train movement. These three reactions should be simultaneously recorded in such cars and in those with which their performances are to be compared. For longitudinal action, it is probable that the peaks would be found of more importance than the total counts, but this would be subject to comprehensive judgment from the breakdown of the gravity-value counts recorded in each car undergoing check. This would require instruments of size and weight permitting reasonably convenient portability.

For years there has been a crying need for such measuring equipment and, after much discouraging experience with the instrument makers and others in efforts to have it designed and developed, our engineers, themselves, produced a set of handmade accelerometers which, from experience to date, have demonstrated the embodiment of the required fundamental characteristics. These particular instruments are arranged for passenger-car recording and in that service have successfully produced, over tangents and curves, reliable and continuous records of the kind desired. The measuring portion is divided into two units, one to register the vertical accelerations and, the other, a horizontal unit, to record in both directions either lateral or longitudinal accelerations, depending upon the position in which it is placed. There appears to be no reason why the same, or equivalent, equipment, adjusted for the accelerations of freight-car movement, cannot be produced. The rate of progress in both passenger and freight operations can be ascertained only on the basis of sound and comprehensive instrumentation.

New Book . . .

SINGING RAILS, by Herbert L. Pease. 304 pages. 5¼ in. by 8 in. Bound in cloth. Published by Thomas Y. Crowell Co., New York. Price, $3.

Bitten by the railroad bug at a tender age. Herbert Pease tacked a hypothetical three years onto his legal seventeen and went to work as night telegrapher for the Chicago & Alton in 1900. The color and drama imagined during his earlier years came to pass, and even more quickly than he anticipated. His first night on duty was marred, for one thing, by the gunplay of an irate brother of a local young lady "in trouble" — to whom the night telegrapher (newly arrived) and his counterpart (just departed) were one and the same. As the story is told, there were few dull spots in Mr. Pease's career. From his first job receiving orders from dispatchers for relay to passing trains, to the confusion of a central freight office with its thirty-two relay wires demanding all too frequently simultaneous attention, to the city ticket office of the Wabash in Chicago, where the routine was complicated by sales to scalpers after hours and by being fired temporarily when such practices were brought to the boss's attention by a spotter — the pace was swift, long and often hectic.

Mr. Pease eventually became one of the Missouri Pacific's traveling passenger agents, an occupation which he says demanded a certain amount of calculated skulduggery in outwitting TPA's of rival roads (without offending the home office), a flair for poker, an ability to hold one's liquor, hard work and ingenuity (even to acting as a barker for a traveling snake show).

A personal history, Mr. Pease's story throws interesting and informative light on some railroading practices during the early nineteen hundreds.

GENERAL NEWS

All Interests Favor Extending Car Program

Proposal wins unanimous approval at O.I.C. hearing

Extension beyond February 28, 1949, of the voluntary agreement covering the allocation of steel for the freight-car building and repair program is favored by the railroads, carbuilders and interested government agencies. This unanimous endorsement of the proposed extension for six or seven months was recorded at December 9 hearings held in Washington, D. C., by the Department of Commerce's Office of Industry Cooperation.

O.I.C. supervises all steel-allocation programs under the provisions of legislation (Public Law 395) enacted late last year to grant immunity from anti-trust laws to participants in agreements for the distribution of scarce materials. The law expires February 28, 1949, but has provisions permitting the extension of existing agreements for six months beyond that date. The extension of the freight-car program would be for six months if the law remains unchanged; if the law is extended, the program's extension would run seven months, or to the end of 1949's third quarter.

Enlargement of Program Not Considered

The proposed extension, which must be approved by the Attorney General, would leave the program on its present basis, i.e., the new-car phase would continue allocations for only 10,000 cars a month. Thus the agenda of the December 9 hearing did not contemplate consideration of demands by Director J. Monroe Johnson of the Office of Defense Transportation for an enlarged program, although the statement made there by B. S. Van Rensselaer, chief of O.I.C.'s Transportation Equipment Division, embodied what amounted to a defense of O.I.C.'s failure to support the O.D.T. Director (see *Railway Age* of December 11, page 73).

As Director R. L. Glenn of O.D.T.'s Division of Manpower and Materials pointed out, Colonel Johnson was pressing his demands with Secretary of Commerce Sawyer. In that connection, the colonel hoped to have a meeting of O.I.C.'s Steel Products Advisory Committee called for this month and December 16 had been mentioned as a "tentative" date. However, no such meeting had been called up to December 14.

Director Earl W. Clark of O.I.C. presided at the December 9 hearing on the proposed extension of the present program, and the presentation, in addition to those of Messrs. Van Rensselaer and Glenn, included statements by James H. Aydelott, vice-president of the Association of American Railroads, Samuel M. Felton, president of the American Railway Car Institute, S. R. Secor, assistant general purchasing agent of the Chesapeake & Ohio, H. B. Drury of the National Security Resources Board, and Captain T. D. Jacobs of the Munitions Board.

In announcing O.I.C.'s endorsement of the proposed extension, Mr. Van Rensselaer said that continuation on the 10,000-car basis was the "largest" program the Steel Products Advisory Committee was willing to approve. In making its decision to support the extension on that basis, Mr. Van Rensselaer continued, O.I.C. "was forced to weigh the desirability of increasing the production of freight cars. . .against the impact of an enlarged program upon other essential segments of the national economy, the availability of steel plate, and the willingness of the railroads to support with purchase orders a building program in excess of 10,000 cars monthly."

As to the latter, Mr. Van Rensselaer presented figures showing that during the period from April 1 to December 1, a total of 75,934, new cars was shipped as against an aggregate of 59,195 new cars ordered. "On April 30," he added, "there were 135,176 freight cars on order and undelivered. On December 1, this figure had diminished to 106,402 freight cars. . . . The Office of Industry Cooperation has received no evidence of any impending volume of new orders that would materially increase this backlog."

Meanwhile, the chief of O.I.C.'s Transportation Equipment Division had calculated that the present production and repair program takes 18 per cent of all steel-plate production; and that the percentage would rise to 20 if the new-car phase were increased to 12,000 cars monthly. Thus, he said, it was O.I.C.'s "considered judgment" that any proposal to allot more plate to the freight-car program "should be subjected to the most careful study and review before affirmative action is recommended."

As to progress on increasing the car supply by about 250,000 cars, as O.I.C. thinks should be done "as rapidly as possible subject to the limitations imposed by the present abnormal conditions," Mr. Van Rensselaer said that, during the three-months period from August 1 through October 31, the net gain was 13,000 cars. He pointed out that this was at the annual rate of 52,000 cars. He added: "While it is essential to increase car ownership as rapidly as possible, a more realistic approach to the freight car problem under present conditions is the importance of supporting maintenance requirements to the fullest extent possible in order to increase the total number of serviceable cars."

The presentation made by Director Glenn of O.D.T.'s Division of Manpower and Materials was a brief statement of that agency's support of the extension proposal. Mr. Glenn also said, however that his supporting statement was made "without prejudice" to O.D.T.'s position that the 10,000-car program is inadequate. He presented figures showing that 112,500 cars were built during the 12 months ended with November. This was 7,500 cars short of the 120,000-car goal.

"Freight car shortages," Mr. Glenn added, "have continued to exist notwithstanding increases in freight car construction during the past year and the continuation of O.D.T. orders requiring the heavy loading of cars. Any disruption of the present program which would lead to a curtailment in the construction of domestic freight cars would adversely affect the domestic economy and have serious implications from a standpoint of national security."

Is Present Allocation "Large Enough"?

From the standpoint of the National Security Resources Board, the only

RAILROAD UNIONS WILL WORK FOR REPEAL OF TAFT-HARTLEY ACT

Member unions of the Railway Labor Executives' Association "will join hands with the rest of the trade union movement in a battle for repeal" of the Labor-Management Relations (Taft-Hartley) Act, according to an announcement in the latest issue of "Labor." That decision was made at a recent R.L.E.A. meeting in Washington, D. C.

The meeting also put R.L.E.A. on record in favor of an amendment to the Wages and Hours Act which would fix a minimum wage of "at least $1 an hour"; and in opposition to any new effort to enact legislation like that proposed this year in the Jennings bill which would have limited the venue in cases arising under the Federal Employers Liability Act.

question is whether the present steel allocation is "large enough," Mr. Drury said. The car supply, he added, is "at present seriously inadequate even for peacetime needs; it would constitute a grave handicap and danger in an emergency." Captain Jacobs noted merely that the Munitions Board was already on record in favor of extending the program.

In that connection, it was recalled that O.D.T. Director Johnson's recent statements calling for an enlarged program have included reference to a letter written to Secretary of Commerce Sawyer by Chairman D. F. Carpenter of the Munitions Board. In that letter, Mr. Carpenter expressed the board's desire to support an extension of the program, stepped up to a 12,000-car monthly output. He also said that unless provision is made now for "early replacement" of over-age freight cars, "a war emergency will find the industrial production of the nation severely curtailed for lack of required transportation facilities."

Aydelott Calls for Repair Material

Vice-President Aydelott of the A.A.R. emphasized his view that every effort should be made to maintain the flow of materials allocated for freight-car repairs. On October 31, he said, there were 84,290 bad order cars as compared with 76,988 on October 31, 1947. The former figure was 30,000 above what is considered "normal," Mr. Aydelott added.

Later on, he said the railroads were reporting that steel for the general overhauling of freight cars "is not available in the necessary tonnages," and this "is delaying production in the repair yards." They are also reporting that "some considerable production of new equipment in railroad shops has been lost because of the inability to secure steel." Assistant General Purchasing Agent Secor of the C. & O. also emphasized, in his brief statement, the desirability of supplying sufficient steel for repair programs.

As to the number of new cars on order, Mr. Aydelott said that the current total is "almost" the equivalent "of the number that has been built in the past 12 months." His general argument in support of the proposed extension referred to the continuing tight car-supply situation, and to demands of shippers for cancellation of O.D.T.'s minimum loading orders. The A.A.R. vice-president also listed "other factors in our national economy which would seem to confirm the need" for the proposed extension. The list included the retirement of worn-out cars; the increase in the number of all-steel cars due for repairs; and the prospects for continuance of traffic at a high level in view of government and industrial programs and the maximum production of farm products.

President Felton of the American Railway Car Institute said that members of that association could not form public policy regarding the adequacy or inadequacy of the freight car supply. Neither, he added, were the builders in a position to determine the number of cars of varying types that will, or should, be ordered by the railroads. Mr. Felton went on, however, to cite pronouncements of O.D.T. Director Johnson and other government officials, and of A.A.R. President William T. Faricy, suggesting that such pronouncements indicated that "government agencies and the railroads seem to recognize the need for new cars." The "problem," as the institute's president stated it, "apparently is one of the railroads' financial ability to purchase new cars in large numbers."

The evidence in hand made it "quite apparent" to Mr. Felton that "if there is to be any appreciable improvement in the number of cars at work within the next two years, then at least 12,000 to 14,000 new cars per month will be needed." The builders have assured Colonel Johnson that they have capacity thus to increase their output, provided they obtain orders "sufficiently far ahead to make planning for large-scale production possible"; and provided they obtain a steady flow of needed materials— especially steel, including wheels and axles, but also "pig iron, lumber, etc."

Standardization of Cars

Mr. Felton also noted that maximum production is not achieved on short runs of cars with different specifications. "If different railroads," he added, "would substantially standardize on their needs, it would be possible to increase production by a gratifying percentage by running through larger lots of each type of car, eliminating change-over time and gaining benefits of large-scale production." As to the flow of steel, he said that requests of car builders "have been cut back time and again," and "in only two months during 1948" have they received the total amount of steel called for under the allocation program.

On that score, the builders have "no quarrel" with the steel industry, for they recognize the problem it has to meet demands accumulated during the war. "But," Mr. Felton added, "the fact remains that our production for more than two years now has been in almost constant ratio to the amount of steel received 60 to 90 days previously."

In closing, the institute's president recommended extension of the program, which "by and large . . . has worked to date." He went on to suggest that confusion might be avoided if the present lump-sum allocation plan were modified to provide for separate allocations for new cars and for the maintenance and repair programs. Meanwhile, he did not find the outlook "bright" for the months following January.

"Some companies," he said, "are running out of orders. And steel allocations, therefore, for the first quarter have been reduced sharply and this must inevitably reflect itself in fewer new cars next spring. It is evidence that more orders are needed immediately and with them the necessary increase in steel.

NEW YORK RAILROAD CLUB'S ESSAY CONTEST JUDGES NAMED

A committee of three railroad presidents —William White of the Delaware, Lackawanna & Western; Revelle W. Brown of the Reading, and Laurence F. Whittemore of the New York, New Haven & Hartford— will serve as judges to select the winning papers in the Roy V. Wright Memorial Essay Contest being conducted by the New York Railroad Club. Articles to be considered for the awards must be submitted to David W. Pye, executive secretary of the club, at 30 Church street, New York 7, before February 1, 1949.

The contest, announced in *Railway Age* of June 5, page 77, is limited to men not over 35 years of age, but there are no restrictions as to their connection with the railroad industry or the New York Railroad Club. The subject of the paper may be selected by the contestant, so long as it is a constructive discussion of some phase of railroading. The essays may be as long as is necessary above a minimum of 2,500 words, with or without illustrations. Possible topics were outlined in the *Railway Age* announcement of the contest, but others will be equally acceptable. The writer of the best article, in the opinion of the judges, will receive an award of $750, and there will be second and third prizes of $500 and $250, respectively.

Following the death of Roy V. Wright, late managing editor of *Railway Age* and editor of *Railway Mechanical Engineer*, the executive committee of the New York Railroad Club named this contest in tribute to his great interest in it.

Hill Quits Resources Board

Arthur M. Hill resigned as chairman of the National Security Resources Board, effective December 15, to return to his former positions as chairman of the executive committee of the Greyhound Corporation and president of the National Association of Motor Bus Operators. He will be succeeded by John R. Steelman, who will serve as the board's acting chairman while continuing also in his present position of assistant to President Truman.

On the day before his resignation became effective, Mr. Hill announced the appointment of Walter S. Rainville, Jr., director of research for the American Transit Association, as consultant to the board on transportation mobilization problems. "On loan from that association, Mr. Rainville will be associated with N.S.R.B.'s Office of Transportation and Storage," the announcement said. That office is headed by Captain Granville Conway, former ad-

ministrator of the War Shipping Administration (see *Railway Age* of December 4, page 61). Mr. Rainville was a member of the Office of Defense Transportation's staff during World War II, serving as director of equipment and research in the Highway Transport Department.

Sees Need for Continuing Rail-Transport Controls

Continuation of President Truman's allocation powers including that authorizing him to allocate "the use of transportation equipment and facilities by rail carriers" has been recommended by Secretary of Commerce Sawyer in the fifth of the quarterly reports which he is required to make to the President and Congress under the Second Decontrol Act of 1947. The controls over rail transport are those maintained by the Office of Defense Transportation to which the President has delegated the authority involved.

Secretary Sawyer's reference to them was brief. He said they help to bring about "efficient utilization of rail carrying equipment under conditions of exceptionally heavy demand."

Roads Working to Publish General Rate Increases in Basic Tariffs

Walter J. Kelly, traffic officer of the Association of American Railroads, has assured Interstate Commerce Commissioner Aitchison that the railroads are going forward "as rapidly as is practicable" with the publication in their basic tariffs of the freight-rate increases authorized by the commission in the Ex Parte 162 and 166 proceedings. Those two increases are now published in separate master tariffs.

Mr. Kelly explained the situation to the commissioner in a December 13 letter which was in response to a question asked by Mr. Aitchison during last week's argument before the commission on the carriers' Ex Parte 168 motion for an interim freight-rate increase of 8 per cent. The question asked when the commission could expect "that the carriers will reissue their tariffs and pick up the 162 and 166 increases in the basic rates and do what everybody wants—simplify the tariff situation."

The A.A.R. traffic officer said that the work of specific publication of the former increases, "by supplement or reissue," was going forward notwithstanding the pendency of the Ex Parte 168 proceeding. "Many such supplements and reissues," Mr. Kelly added, "have been filed with the commission, others are in proof, and still others are being compiled in manuscripts." He also said that the railroads are making plans for "immediate" preparation of a composite master tariff bringing together in one issue the Ex Parte 162 and 166 increases.

Along with his own letter, Mr. Kelly sent Commissioner Aitchison a copy of a September 10 letter wherein the chief of the commission's Section of Tariffs, W. B. Hammer, had suggested to Mr. Kelly that something should be done to simplify the tariffs. Mr. Hammer summed up his statement of the problem in this way:

"Thus today the railroads and the shipping public, in attempting to quote and to verify rates, must commence with tariffs many of which were poorly compiled initially, and nearly all of which have been largely eroded by extensive over-supplementation, and then successively increase the rates determined from these tariffs by the use of two 'master' tariffs, each of bewildering complexity. The result is that it is invariably difficult and often impossible for even an expert to say, with assurance, what the rate or charge is for any service which the tariffs purport to cover."

Monon Expands Traffic Research

The Chicago, Indianapolis & Louisville has announced that it will employ modern research methods to evaluate its expanding traffic and to determine the effects that changes and improvements in service have on revenue. Richard Rice, traffic analyst and co-author of the article, "Taking the Guesswork Out of the Passenger Business," which appeared in the *Railway Age* Passenger Progress issue of November 20, will supervise the research. Passenger traffic will be studied first, it was stated.

Commenting on the research program, Warren W. Brown, vice-president—traffic of the Monon, said: "Changes in passenger schedules and equipment have already brought hundreds of thousands of dollars in new annual revenue, and further refinements appear to be possible that will continue the trend. Basically complementing the Monon's progressive achievements in the field of public relations, traffic research will probe even more deeply into the problem of determining the types of service passengers and shippers want, and then determining the most efficient way this service can be rendered."

Morse Heads Diesel Engine Men

Robert H. Morse, Jr., vice-president in charge of all operations of Fairbanks, Morse & Co., Chicago, was elected president and treasurer of the Diesel Engine Manufacturers Association at the organization's annual meeting in Chicago on December 8. Among the guest speakers at the meeting was Dr. John T. Rettaliata, Dean of the School of Engineering, Illinois Institute of Technology, who said that the gas turbine will probably not be in operation until 1950 and that it is not going to put the Diesel engine out of business. Said Dr. Rettaliata: "In most applications the turbine is not a direct competitor. Up to 2,500 hp. the Diesel will not have serious competition from the turbine. In applications from 5,000 to 20,000 hp. the gas turbine will have a field of its own."

Elected as vice-presidents of the D.E.M.A. were A. W. McKinney, executive vice-president of the National Supply Company, and O. H. Fischer, president of the Union Diesel Engine Company. Directors elected were George W. Codrington, vice-president of General Motors Corporation and general manager of its Cleveland Diesel Engine Division; Perry T. Egbert, vice-president in charge of Diesel and locomotive sales, American Locomotive Company; Robert E. Friend, president of Nordberg Manufacturing Company; Gordon Lefebvre, president of the Cooper-Bessemer Corporation; Walter A. Rentschler, vice-president of the Lima-Hamilton Corporation; E. J. Schwanhausser, vice-president in charge of sales, Worthington Pump & Machinery Corp.; Marvin W. Smith, executive vice-president of the Baldwin Locomotive Works; Mr. Morse; Mr. McKinney; and Mr. Fischer. Harvey T. Hill, who was re-appointed executive director of D.E.M.A., starts his fifth year in that post.

Ohio Board Celebrates 25th Year; Demands Action on Steel for Cars

Four hundred shippers and receivers of freight and railroad men attended the 25th anniversary meeting of the Ohio Valley Transportation Advisory Board, at Cincinnati, Ohio, on December 10. The Board passed a resolution introduced by A. C. Coyle, traffic manager, Johns-Manville Products Corporation, and chairman of the board's car efficiency committee, urging that "the Office of Industry Co-operation, Steel Products Industry Advisory Committee, Association of American Railroads and individual rail carriers provide sufficient steel to insure from 12,000 to 14,000 new cars a month" and that "the

TRUMAN STILL WANTS ST. LAWRENCE SEAWAY

President Truman said at a recent press conference that he will again urge Congress to approve the United States-Canada agreement for development of the proposed St. Lawrence seaway and power project. The President's statement came in response to a question about the matter; and he went on to point out that he had urged favorable action on the agreement in almost all of his state-of-the-union messages to Congress.

At an earlier press conference, the President had said that he did not favor a piecemeal approach to the project, such as would be involved in the state of New York's proposal to develop the hydro-electric portion jointly with the Canadian province of Ontario.

railroads see to it that necessary orders are assured car builders accordingly."

Reporting for the railroad contact committee, D. A. Fawcett, general manager, New York Central, Cincinnati, said the supply of box cars was currently plentiful and that even the hopper car situation had been "good" for the past 45 to 60 days. Less carload tonnage in board territory was estimated to be down 20 per cent; he said freighthouses were still badly congested on Monday mornings because few deliveries were possible over the week-end. Most roads, he said, were reporting numbers of locomotives in storage.

A questionnaire to members distributed by the board showed the following replies:

Railroad Service	
Rating	No. of Shippers
Good	84
Fair	84
Poor	8
Car Supply	
Good	103
Fair	60
Poor	10
Condition of Cars	
Good	61
Fair	82
Poor	31

The loss and damage prevention committee, headed by C. T. Coy, traffic manager, Eli Lilly & Co., Indianapolis, Ind., urged that members get and use receivers' damage reports so that shippers can be advised on continuing damage and loss due to chronically incorrect packing. A. L. Green, Freight Claim Division, A.A.R., Chicago, reported that the number of freight loss and damage claims filed with the railroads in the first half of 1948 was 17.5 per cent fewer than in 1947, a condition which, he suggested, reflected the current decrease in l.c.l. tonnage. He noted that the suspense account on loss and damage at the end of June stood at $25 million, a sum which will eventually be added to the loss and damage total. The latter is expected to run at about $140 million this year, "every nickel of which comes out of freight rates."

Elected as officers for the forthcoming year were: E. C. Perkins, manager of sales, Appalachian Coals, Inc., Cincinnati, general chairman; Freeman Bradford, general manager, Board of Trade, Indianapolis, alternate general chairman; R. A. Whitty, general traffic manager, Belknap Hardware & Manufacturing Co., Louisville, Ky., chairman, executive committee; Ralph Morden, traffic manager, Marble Cliff Quarries Company, Columbus, Ohio, vice-chairman, and C. W. Memke, traffic manager, Edwards Manufacturing Company, general secretary.

Texas Intrastate Rates

The Interstate Commerce Commission has now set January 14, 1949, as the date on which it will hear oral argument at Washington, D. C., in its No. 30024 investigation of intrastate freight rates in Texas. The argument had previously been scheduled for November 26. The investigation was instituted in response to a petition filed by Texas roads after the Railroad Commission of that state had refused to permit them to add the Ex Parte 166 increases to their intrastate rates.

"Q" SOLICITS COMMUTER DATA

The Chicago, Burlington & Quincy is currently seeking schedule preferences of commuters on its Chicago-Aurora, Ill., line, with the idea of rearranging schedules to suit the largest number of passengers. Commuters are furnished questionnaires on which they are requested to specify the time they would like to have trains operated. This data is to be classified and schedules rearranged to meet the desire of the majority as far as is practicable, the road states.

New Vapor Steam Generator Exhibited at Chicago

The Vapor Heating Corporation exhibited and demonstrated to a group of about 100 interested railway officers and locomotive builders, assembled on December 14 at its Chicago plant, a new steam generator for Diesel locomotives designed to give increased capacity, reliability and flexibility in supplying the large amounts of steam required for operating long passenger trains under extreme temperature conditions.

The new generator, known as the Vapor Intensi-Fired OK No. 4625, is constructed with patented, staggered coil assemblies used in previous Vapor generators. New features include an offset blower which gives the air for combustion a circular motion in passing through the coils and a further simplification of OK controls which are largely assembled in a simple front panel.

An output of 2,500 lb. of steam per hour is developed at 81.2 per cent efficiency in the new generator, which occupies practically the same amount of floor space as the 1,600 lb. unit formerly built.

Okay Commuter Fare Increase

The Illinois Commerce Commission on December 7 formally approved higher commutation fares for seven railroads operating in the Chicago area. Six of the carriers will increase their fares this month by eight per cent and one—the Chicago, Aurora & Elgin—will raise its fares five per cent, as was noted in the *Railway Age* of December 4, page 82.

The companies receiving the eight per cent boost are the Chicago, Burlington & Quincy; Chicago, Rock Island & Pacific; Chicago, Milwaukee, St. Paul & Pacific; Atchison, Topeka & Santa Fe; Gulf, Mobile & Ohio, and Chicago & Western Indiana. The Chicago & North Western and the Illinois Central had already obtained similar increases, the former having done so by virtue of a court order restraining the commission from blocking the raise. The I. C. was granted its increase on November 5, as reported in the *Railway Age* of November 13, page 59.

Otto S. Beyer Dies

Otto S. Beyer, engineer and industrial relations consultant, died on December 8 at Washington, D. C., after a three-week illness. Mr. Beyer, who was born on September 18, 188[illegible], at Woodridge, N. J., was graduated from the Stevens Institute of Technology in 1907 with an M.E. degree and did graduate work at New York University and the University of Pennsylvania. After service with the Midvale Steel Co., the Erie and the Chicago, Rock Island & Pacific, Mr. Beyer became a captain in the United States Army, during World War I, organizing and training technical personnel for railway and heavy artillery maintenance, later directing training of ordnance personnel. In 1920 he entered practice as a consulting engineer on matters relating to railroad labor and management co-operation. In 1933 he was appointed director of the Section of Labor Relations for the Federal Coordinator of Transportation, subsequently becoming a member of the National Mediation Board (chairman in 1937 and 1940). He became director of the Division of Transportation Personnel of the Office of Defense Transportation in January, 1942, representing transportation on the War Manpower Commission. Mr. Beyer also served as industrial relations consultant to the Tennessee Valley Authority, Bonneville Power Administration, Maritime Commission, Alaska Railroad, and Department of the Interior.

To Discuss Pallets at Materials Handling Exposition

The third annual Materials Handling Exposition, sponsored jointly by the American Society of Mechanical Engineers and the Materials Handling Institute, will be held at the Philadelphia, (Pa.) Convention Hall, January 10-14, 1949. Many features of the technical sessions, in addition to the equipment displays, will be of interest to railroad men, not the least of which will be the session on economies in distribution which, of course, includes transportation. At this session, to be held on Tuesday, January 11, industry will present its recommendations to the carriers on rate reductions for palletized shipments, through Neil Loney, industrial consultant, Detroit, Mich., while Fred Carpi, vice-president, traf-

fic, of the Pennsylvania, W. F. White of the Great Southern Trucking Company, and J. W. Milliken, associate editor of *Railway Age*, will discuss the subject from their different points of view.

Other technical sessions will dwell on such subjects as warehousing, the handling of awkward shapes of materials, segregation of costs on materials handling, bulk handling, developments in industrial truck design and application, lessons in materials handling learned from the Berlin Airlift, and many others, featuring spokesmen for various branches of the materials handling equipment industry as well as from users of that equipment.

The exhibits will include the products of more than 200 different manufacturers, much new equipment being exhibited for the first time.

Reynolds Metals Pleased with New 30,000-lb. Truck Rates

The Reynolds Metals Company reports that the new 30,000-lb. truck rates prevailing between Arizona and 26 eastern points will affect transportation of 25,500,000 lb. of aluminum and save the company $75,000 annually. The reduced rates, which were noted in *Railway Age* of October 23, page 52, were approved by the Rocky Mountain Tariff Bureau, Denver, Colo., effective September 29, and are said to be 10 per cent lower than existing rail rates.

The company states that a high percentage of shipments go to markets east of the Mississippi river and that trucks are able to handle large quantities of manufactured products with less in-transit time than rail shipments. Richard W. Pickens, manager of the Reynolds plant in Phoenix, Ariz., declares that "shipments to the East will be accelerated" as a result of the new rate.

1947 Salaries Over $10,000 Took 0.74 Per Cent of Payroll

Officers receiving salaries of $10,000 or more in 1947 took 0.74 per cent of that year's aggregate payroll of Class I line-haul railroads and Class I switching companies, including 17 carriers in those classes which reported no salaries of $10,000 or more. This compares with a 1946 figure of 0.68 per cent.

The 1947 salary data, derived from returns made by the carriers in their annual reports under Schedule 562, have been summarized in the usual way by the Bureau of Transport Economics and Statistics of the Interstate Commerce Commission, the summary being No. 4727 of the bureau. It shows that 1,910 officers received salaries of $10,000 or more in 1947, as compared with 1,683 in 1946, the aggregate amount paid to them having been $33,368,597, as compared with $29,422,732.

The average 1947 compensation of the $10,000-and-over group was $17,470, as compared with $17,482 in 1946. The group consisted of 0.137 per cent of all employees in 1947, as compared with 0.12 per cent in 1946.

Thirty-three 1947 salaries were in the $60,000-and-over bracket, as compared with 32 in 1946 and 26 in 1945. The aggregate 1947 compensation of these top executives was $2,447,253, or 7.33 per cent of the total paid to the whole $10,000-and-over group. Salaries of 1,068 officers, or more than half of the group, fell in the $10,000-to-$14,999 class, while 275 officers received 1947 salaries of $25,000 or more, as compared with 266 in 1946 and 215 in 1945.

In addition to the information on annual salaries of $10,000 or more, the statement, like its predecessors, contains a table which summarizes data on salaries paid by Class I line-haul roads to executives, officials and staff assistants assigned to Division 1 and Division 2 in the commission's wage statistics. Employees thus assigned in 1947 totaled 15,194, including 6,767 executives, general officers and assistants, whose average 1947 salary was $9,070, as compared with $8,688 in 1946; and 8,427 division officers, assistants and staff assistants, whose average 1947 salary was $5,774, as compared with $5,566 in 1946. These salary averages compare with 1929 averages of $7,508 and $4,166, respectively.

Commuters Tell Preferences

Commuters who patronize the Chicago & North Western have informed the road that they prefer suburban coaches with brown plush seats, brown curtains, cream and green linotile flooring, green and white walls and aluminum baggage racks. As noted in the *Railway Age* of November 20, page 222, suburban customers of the North Western "voted" on four different interior decoration treatments, one of which the railroad will use in refurbishing 100 commuter coaches.

A total of 6,455 commuters inspected the "referendum" car during 10 days of balloting and 54 per cent favored the winning decoration plan. Comments concerning suburban service obtained during the poll are being compiled and studied by the road's officers.

Replacement of Old Steam Power Highly Profitable

A fuel saving of $20,000 a year is one result of replacement of steam by Diesel-electric power on the 33-mile Belfast & Moosehead Lake. Two American Locomotive-General Electric units in place of three steam locomotives have cut fuel bills to one-fifth of what they were previously.

In 1946, when the B. & M. L. decided to replace its three 45-year old steam locomotives, coal bills were averaging $73 per day; about 53 cents per train-mile. Today, with Diesel-electrics in operation, fuel costs have dropped to $4,800 a year; about 11 cents per train-mile.

A reduction in cost of repair work, servicing facilities and the need for standby power have effected further savings, making a total reduction of 70 per cent in overall cost of motive-power operation.

Two trains are operated each week day, a morning freight with passenger accommodations and an afternoon pas-

The remodelled ticket office in Reading Terminal, Philadelphia, Pa.

senger train which also carries milk. The Diesel-electrics are scheduled to make the run in a minimum of 75 minutes over grades up to two per cent that take the line up over 500 feet in 16 miles.

The Belfast & Moosehead Lake is municipally controlled; the city of Belfast owns 77 per cent of the outstanding stock. Originally built by the city, it was leased to the Maine Central and operated as a part of that system. The Maine Central gave up the lease in 1926 and since then the road has been operated independently. Local businessmen elected by trustees who vote the city's stocks, serve as directors.

Canadian Roads Ask Early Rate Increase Decision

Canadian railroads, which, as reported in *Railway Age* of July 31, page 51, are seeking interim and permanent freight-rate increases of 15 and 20 per cent, respectively, have requested the Board of Transport Commissioners, Ottawa, Ont., to decide on the permanent increase immediately after disposing of the 15 per cent increase petition. The roads had previously agreed to let the question of the larger increase be included in a general rate inquiry to be undertaken by the board in response to demands from various Canadian provinces. Their present request for action on the permanent increase has been made in view of the delay in hearings both on the interim raise and on the general inquiry. Hearings on the 15 per cent interim increase are now scheduled for next month.

Douglass Will Accept Reappointment to N.M.B.

Chairman Frank P. Douglass of the National Mediation Board has agreed to continue indefinitely in office at President Truman's request. He had previously planned to retire on February 1, 1949, when his present term expires; but he abandoned the plan after a recent talk with the President. Judge Douglass has been a member of N.M.B. since 1944.

Federation for Railway Progress Forms Shippers Advisory Committee

Thomas J. Deegan, Jr., president of the Federation for Railway Progress, has announced the formation by the federation of a shippers advisory committee "to provide more effective cooperation between the railroads and their customers."

Members of the committee are Ernest J. Leger, general traffic manager, Johnson & Johnson, chairman; C. H. Lemke, general traffic manager, Heywood-Wakefield Company; V. R. Tupper, general traffic manager, Remington Rand, Inc.; E. Richardson, Lever Bros. Company; H. D. Fenske, director of traffic, Great Lakes Steel Corporation; Hugh G. Huhn, general traffic manager, Libby-Owens-Ford Glass Company; Ervin Manske, general traffic manager, Allis-Chalmers Manufacturing Company; H. M. Frazer, general traffic manager, F. W. Woolworth Company, and Sheldon Wagner, president, George F. Wagner Company.

Mr. Leger, in accepting the chairmanship, stated "Too few realize that manufacturers are in partnership with the railroads, since goods are of no value if they are not brought to the consumer." He added that the committee will study present freight service and recommend changes and improvements to both shippers and railroads.

October Accident Statistics

The Interstate Commerce Commission has made public its Bureau of Transport Economics and Statistics' preliminary summary of steam railway accidents for October and for this year's first 10 months. The compilation, which is subject to revision, follows:

Item	Month of October		10 months ended with October	
	1948	1947	1948	1947
Trespassers				
Number of train accidents*	967	1,441	10,056	13,928
Number of casualties in train, train-service and non-train accidents:				
Trespassers:				
Killed	122	124	1,216	1,217
Injured	87	110	969	1,024
Passengers on trains:				
(a) In train accidents*				
Killed ..	2	..	19	33
Injured	89	67	857	1,111
(b) In train-service accidents				
Killed ..	3	1	21	26
Injured	178	224	2,226	2,393
Travelers not on trains:				
Killed	2	1	8	8
Injured	90	87	841	771
Employees on duty:				
Killed	52	52	479	588
Injured	2,515	2,948	25,949	29,983
All other non-trespassers:**				
Killed	196	160	1,407	1,601
Injured	595	513	5,195	5,285
Total—All classes of persons:				
Killed	377	338	3,150	3,473
Injured	3,554	3,949	36,037	40,567

*Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former caused damage of more than $150 to railway property in 1947. Beginning January 1, 1948, this minimum was raised to more than $250. Only a minor part of the total accidents result in casualties to persons.

**Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers,* were as follows:

Persons:				
Killed	173	147	1,273	1,430
Injured	412	318	3,271	3,206

Freight Car Loadings

Loadings of revenue freight in the week ended December 11 totaled 783,276 cars, the Association of American Railroads announced on December 16. This was a decrease of 20,907 cars, or 2.6 per cent, under the preceding week, a decrease of 70,883 cars, or 8.3 per cent, under the corresponding week last year, and a drop of 45,475 cars, or 5.5 per cent, under the equivalent 1946 week.

Loadings of revenue freight for the week ended December 4 totaled 804,183 cars, and the summary for that week as compiled by the Car Service Division, A.A.R., follows:

Revenue Freight Car Loadings
For the week ended Saturday, December 4

District	1948	1947	1946
Eastern	148,493	159,785	144,970
Allegheny	164,833	180,600	138,774
Pocahontas	63,584	73,388	24,085
Southern	129,512	144,695	126,741
Northwestern	100,155	102,681	99,000
Central Western	128,799	143,677	128,176
Southwestern	68,807	73,762	67,338
Total Western Districts	297,761	320,120	294,514
Total All Roads	804,183	878,588	729,084
Commodities:			
Grain and grain products	54,002	49,439	55,007
Livestock	14,174	16,340	18,627
Coal	162,911	197,751	59,943
Coke	14,923	14,820	8,144
Forest products	40,514	49,833	48,893
Ore	32,472	22,478	14,108
Merchandise l.c.l.	101,821	117,754	128,868
Miscellaneous	383,366	410,173	395,494
December 4	804,183	878,588	729,084
November 27	723,090	792,331	660,911
November 20	857,492	902,662	806,593
November 13	871,677	878,283	917,124
November 6	843,166	910,170	913,345
Cumulative total 48 weeks	40,686,842	42,216,545	39,048,375

In Canada.—Carloadings for the week ended December 4 totaled 81,306 cars as compared with 85,313 cars for the previous week, and 81,860 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
December 4, 1948	81,306	34,149
December 6, 1947	81,860	37,212
Cumulative totals for Canada:		
December 4, 1948	3,861,432	1,796,157
December 6, 1947	3,737,576	1,809,500

Study of Motor Operations Of Class I Roads in 1944

The Bureau of Transport Economics and Statistics of the Interstate Commerce Commission has issued a study of "Motor Operations by or for Class I Railroads, 1944." The study, Statement No. 4829 of the bureau, is one of those issued "as information," but not "considered or adopted" by the commission.

It was based on data collected in response to Statistical Series Circular No. 29, issued October 12, 1944, and called for the reporting by each class I road of information on the interurban motor vehicle routes operated by or for it in a selected test week—August 20-26, 1944. Meanwhile, a similar circular calling for information with respect to 1948 operations (Statistical Series Circular No. 34) was sent out on August 20, and the bureau is now at work on this later survey. The analysis of the 1944 data was delayed until this time "for a variety of rea-

sons related to the size of the staff and postwar pressure of work in the bureau," Director W. H. S. Stevens said in the study's preface.

The study is a document of 180 mimeographed sheets, plus appendices. The authors are T. R. Edfeldt and J. A. Little, analysts of the bureau, who worked under the supervision of C. S. Morgan, chief carrier research analyst. Dr. Morgan emphasized in his foreword the study deals only with such motor operations as were *"by* or *for"* class I roads; "independent" or "all-motor" operations of railroad subsidiaries are not covered.

Additional General News appears on page 90.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Chicago, Indianapolis & Louisville** has ordered 30 50-ton 40½-ft. box cars from the Pullman-Standard Car Manufacturing Company. Pullman-Standard, the road announced, also will supply 25 steel underframes for the construction of 25 stock cars (10 double-deck and 15 single-deck) in the Monon's Lafayette, Ind., shops.

LOCOMOTIVES

The **Chicago, Indianapolis & Louisville** has ordered five Diesel-electric locomotive units from Electro-Motive Division of General Motors Corporation. Three of the units will be of the 1,500-hp. road-switching type and two will be of the 600-hp. yard switching type.

SIGNALING

The **American Locomotive Company** has ordered seven sets of intermittent inductive train control equipment from the General Railway Signal Company. This equipment is for installation on Diesel-electric locomotives for freight switching service on the New York Central.

The **Atlantic Coast Line** has placed an order with the Union Switch & Signal Co. for the necessary materials to install centralized traffic control on the double-track main line from Rocky Mount, N. C., to Contentnea, 20 mi. A 5-ft. Style-C control machine located at Rocky Mount will control traffic for either-direction running on each track by signal indications through and between five interlockings. The order includes H-2 searchlight signals, dual-control switch layouts of the A-21 type for two electro-pneumatic interlockings and M-22B type for three electric interlockings, SL-26 electric locks on T-21 hand-operated switch mechanisms for non-interlocked main-line switches, coded reversible track circuit equipment, including necessary code relays, rectifiers, transformers, housings, etc. The field installation will be handled by the railroad's forces.

IRON & STEEL

The **New York Central System** has ordered approximately 100,000 net tons of steel rail, costing about $6,500,000, to meet 1949 requirements. Frank S. Austin, vice-president, purchases and stores, said the orders were placed with the Carnegie-Illinois Steel Company, the Bethlehem Steel Corporation and the Algoma Steel Company of Canada. The orders are for varying amounts of 132-lb., 127-lb. and 105-lb. rail.

OVERSEAS

Lord Ashfield Dies

One of the best-known figures in the British transportation world, Lord Ashfield, the former Albert Henry Stanley, died last month at the age of 73, after an association of some 56 years with the industry, 15 of them in the United States. At his death he was a member of the British Transport Commission, which position he attained as a result of distinguished service since 1933 as chairman of the board directing the affairs of the unified London passenger transport facilities. During the first world war he was President of the Board of Trade, in which capacity he was chairman of the Railway Executive Committee of Great Britain.

SUPPLY TRADE

The **Cherry Rivet Company,** Los Angeles, Cal., has announced the appointment of the **General Aircraft Supply Corporation,** Detroit, Mich., as Michigan distributor for its complete line of blind fasteners, tools, gauges, and kits. General Aircraft also will carry a stock of rivets, guns, etc., for immediate delivery in their sales area.

William A. Ross, formerly sales manager of the Pyle-National Company, has been elected vice-president of the **Equipment Research Corporation,** Chicago.

The **Western Railroad Supply Company** has acquired the business of the Pneumatic Gate Works, formerly of 3335 South Ridgeway avenue, Chicago, and has moved the tools and equipment to its plant at 2428 South Ashland avenue, Chicago 8, where the production of Elliott pneumatic gates, compressors and replacement parts will be consolidated with the manufacturing operations of Western Railroad Supply.

Fred S. Ehrman, whose election as vice-president and director of sales of **Bowser, Inc.,** Fort Wayne, Ind., was reported in the *Railway Age* of November 27, is a native of Fort Wayne and has been associated with Bowser since 1925. He was graduated by Purdue University with a B. S. degree in mechanical engineering, and joined Bowser as an architectural draftsman. He subsequently served in the experimental engineering department and in the sales engineering department of the lubrication and filtration division. He was appointed assistant to the manager of that division in 1936 and manager of the same division in 1938. Mr. Ehrman was advanced to general sales manager in 1944, which post he held at the time of his recent election as vice-president and director of sales.

Fred S. Ehrman

Walter H. Stellner, formerly vice-president in charge of home radio and television set design for **Motorola, Inc.,** has been appointed vice-president of merchandising. **Elmer H. Wavering,** formerly vice-president in charge of automotive product design, has been appointed vice-president of product design.

Herbert E. Smith, president of the **United States Rubber Company,** has been elected chairman of the board and chief executive officer, effective January 1, and **Harry E. Humphreys, Jr.,** vice-president and chairman of the finance committee, has been elected president and chairman of the executive committee.

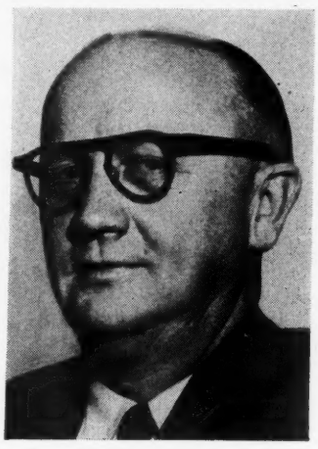
The **Phelps Dodge Copper Products Corporation** has announced the elections of **Henry L. Marion, Edgar P. Dunlaevy** and **Weightman Edwards** as vice-presidents. Mr. Marion was formerly engaged in production control and coordination of

operations as direct assistant to the president, and Mr. Dunlaevy and Mr. Edwards were in the sales department.

Arthur K. Watson has been appointed assistant to the manager of the IBM world trade division of the **International Business Machines Corporation**. He was formerly a sales representatives in the New York office.

Harrison F. Gonnerman, director of research for the **Portland Cement Association** at Chicago, has been promoted to assistant to the vice-president for research and development there, succeeding **F. R. McMillan,** who has retired after having held that post since January, 1947. **Hubert Woods,** research director of the Riverside Cement Company, Los Angeles, Cal., succeeds Mr. Gonnerman.

Arthur H. Smith, railroad sales manager of the **Kerite Company** since November, 1945, has been elected a vice-president. Mr. Smith began his career in 1912 with the Railroad Supply Company and was assistant vice-president



Arthur H. Smith

of that company when he left in 1932 to become vice-president of the Railroad Materials Corporation. He later was associated with the Youngstown Sheet & Tube Co., where he was in charge of sales to eastern railroads. Mr. Smith joined Kerite in 1934.

Herbert J. Rosen, executive vice-president of the **Griffin Wheel Company,** Chicago, has been elected president of the firm, succeeding **Ernest P. Waud,** who has been elected chairman of the executive committee.

OBITUARY

Clarence E. Croisant, division sales manager, railway department, the Lehon Company, Chicago, died at his home in that city on December 10, following a short illness.

Godfrey Gort, president of the Western Railroad Supply Company, Chicago, whose death in that city on October 24 was reported in the *Railway Age* of October 30, was born on June 3, 1885, in Darmstad, Germany. He first entered railway service as a signal wireman's helper on the New York Central, and later served with the Rapid Transit in New York as an assistant maintainer and as a repairman. He then joined the General Railway Signal Company as assistant wiring foreman on the a.c. installation on the N. Y. C., after which he served for about a year as signal maintainer on that road. He subsequently worked with contractors installing the electric hoisting machinery

Godfrey Gort

and lighting and power house equipment on the Pennsylvania terminal at New York. He next joined the Hudson & Manhattan, and shortly thereafter went with the Union Switch & Signal Co. He was later employed by the Norfolk & Western, first as signal wiring foreman and then as assistant superintendent of electrical work, and by the Illinois Central as construction foreman on the a.c. installation at the Chicago terminal. In June, 1913, Mr. Gort became assistant to the superintendent of the crossing-gate department of The Buda Company, Chicago. Later in the same year he was appointed construction foreman and sales engineer for the L. S. Brach Supply Company, with headquarters at New York. He remained in that position until 1915, when he was appointed western representative at Chicago. He next became general sales manager of the same company at Newark, N. J., and on October 1, 1920, was elected vice-president and general manager of the successor company, the L. S. Brach Manufacturing Corporation. He joined the Railroad Supply Company in 1929 as assistant to vice-president at New York, where he remained until 1931, when he became president of the Brach Time Company, a subsidiary of the Waterbury Clock Company. On June 27, 1932, the Western Railroad Supply Company was organized, with general offices in Chicago and with Mr. Gort as president, the position he retained until his death.

Frank W. Hamilton, president of the Ulster Iron Works, Dover, N. J., since 1926, died at his home in Dover on December 1. He was 62 years old.

ORGANIZATIONS

Dr. Raymond B. Kepner, chief medical officer of the Chicago, Burlington & Quincy at Chicago, was elected president of the **American Association of Railway Surgeons** at its sixtieth anniversary meeting at the Palmer House in Chicago, November 21-23, inclusive. The meeting, attended by more than 500 surgeons both in and outside the railroad industry, featured the presentation of technical medical papers. Elected vice-presidents of the association were: Dr. Glenn Whitcomb, surgeon and examiner of the Chicago, Burlington & Quincy, Omaha, Neb.; Dr. D. Ray Murdock, surgeon of the Pennsylvania, Greensburg, Pa.; and Dr. Irwin Schulz, surgeon for both the Chicago, Milwaukee, St. Paul & Pacific and the Chicago & North Western, Milwaukee, Wis. Dr. Arthur R. Metz, chief surgeon, Lines East, Milwaukee Road at Chicago, was re-elected chairman of the executive committee, and Dr. Chester C. Guy, surgeon of the Illinois Central at Chicago, was elected secretary.

R. W. Nelson, assistant vice-president of the Minneapolis & St. Louis, was elected president of the **Traffic Club of New York,** at its annual business meeting and members' dinner on November 30. Other officers elected are: First vice-president, James W. Harley, director of traffic, United States Rubber Company; second vice-president, J. W. Brennan, eastern traffic manager, Chicago, Burlington & Quincy; secretary, G. H. Burtis, assistant traffic manager, Luckenbach Steamship Company; and treasurer, H. H. Huston, general traffic manager, American Can Company. Three new directors to fill three-year terms also were elected: C. S. Decker of the Borden Company; R. F. Hobby of the Gulf, Mobile & Ohio; and E. A. O'Brien of the Union Carbide & Carbon Co.

The New York division of **Railroad Enthusiasts, Inc.,** will hold its next meeting on December 21, at 7:45 p.m., in room 5928, Grand Central Terminal, New York. "A Railfan Looks at American Railroads" will be the subject of a talk by Rogers E. M. Whitaker. A colored movie of the Pacific Great Eastern will be presented by Harold Froth.

Charles Bruneau, Chief, French Railway Mission, Washington, D. C., will present an address entitled "Reconstruction of French Railroads and Bridges

Destroyed in France During World War II" at the December 23 meeting of the **Railway Club of Pittsburgh**, at the Fort Pitt Hotel, Pittsburgh, Pa.

The **Mid-West Shippers Advisory Board** will hold its twenty-fifth anniversary meeting on January 5 and 6, at the Palmer House in Chicago. Principal speaker at the luncheon session on January 6 will be G. Metzman, president of the New York Central.

CAR SERVICE

Revised I.C.C. Service Order No. 822 has been reissued as Second Revised Service Order No. 822. The new order, effective from December 9 until June 30, 1949, unless otherwise modified, authorizes the substitution of two or three refrigerator cars in lieu of one box car ordered for westbound shipments to points in Oregon (except points on the Southern Pacific) and Washington.

I.C.C. Service Order No. 646 has been modified by Amendment No. 5 which set back the expiration date from December 5 to July 15, 1949. The order provides that shipments of vegetables from the Salinas-Watsonville district of California may be initially iced, at carriers' option, at Roseville, Cal., San Jose, or Stockton.

Sixth Revised I.C.C. Service Order No. 104 has been modified by Amendment No. 3 which set back the expiration date from December 10 to June 30, 1949. The order authorizes the substitution of RS type refrigerator cars for box cars ordered for westbound carload shipments.

The Car Service Division, Association of American Railroads, announced December 6 the cancellation on that day of embargoes which had been placed against virtually all freight intended for export out of West Coast ports and intercoastal shipping through East Coast ports. The cancellations were made possible by the settlement of maritime strike on the West Coast. The embargoes had been in effect since September 1.

The Office of Defense Transportation has issued General Permit ODT 18A, Revised-47, effective from November 25 until February 28, 1949. It permits loading of citrus fruits to weights not less than the applicable tariff carload minima.

The Interstate Commerce Commission has refused to grant a request of the Idaho Potato and Onion Shippers Association for discontinuance of arrangements established by Service Order No. 95 for the distribution of refrigerator cars (see *Railway Age* of October 2, page 65).

CONSTRUCTION

R. I. Begins Work on $2,000,000 Yard Improvements at Kansas City

Construction by the Chicago, Rock Island & Pacific of a retarder yard at Armourdale, Kan., is now underway at an estimated cost of $2,000,000. The project, announced briefly in the *Railway* Age of July 31, will expedite freight traffic through the road's Kansas City terminal by permitting the classification of approximately 4,500 incoming and outgoing freight cars daily.

The improvement is being made through a one-half-mi. corridor extending for five mi. just southwest of Kansas City, Kan., heart of the road's 8,000-mi. system. Forty classification tracks will be installed, requiring the removal of some 100,000 cu. yd. of dirt. An intricate communication system is to be set up to include telegraph, teletype, radio and more than three mi. of underground pneumatic tubes. Switches and retarders will be operated from three 40-ft. control towers and five 100-ft. floodlight towers will be erected to permit complete night operations.

An icing dock where 84 cars can be serviced at one time is to be reconstructed for more efficient handling of cars containing perishables. The dock and adjacent trackage is to be located on the north side of the yards, where icing will not interfere with other yard operations.

Already completed is a large warehouse with loading platforms for the transfer of freight between cars and trucks. All operations in the Armourdale yards are directed from a modern yard office built in 1946 at a cost of $50,000.

Louisville & Nashville.—This road has authorized the construction of yard and mechanical facilities for handling freight traffic at Dent, Ky., at an estimated cost of $943,627. The work will include construction of six yard tracks, telephone and telegraph lines, station and office buildings, water station, turntable, coaling station, shops and engine house. A contract for grading, expected to amount to 151,100 cu. yds., is yet to be awarded. The majority of the work will be completed by company forces.

Norfolk & Western.—Work on a four-story general storehouse at this road's Roanoke, Va., shops will begin early next spring, the road announced this week. The new fireproof structure, to cost an estimated $1,800,000, will be built between the Hagerstown line on the north and the passenger car roundhouse on the south and immediately east of the blacksmith shop. Each floor will be 70 ft. by 480 ft. and the total floor area of the building will be 135,000 sq. ft. Except for ventilators, all windows will be of glass blocks. The building will have an automatic sprinkler system throughout. The building's shelving alone will cost $75,000. Four elevators are to be installed, two large ones for freight, one for passengers and one for service. Illumination will be entirely by fluorescent lighting.

Wabash.—Examiner A. G. Nye has recommended in a proposed report that Division 4 of the Interstate Commerce Commission approve this road's plans for relocating a section of its line from a point about 2 miles east of Baylis, Ill., to a point about 2 miles west of Barry. The relocation would involve construction of a new 11.2-mile line to replace the present 11.3-mile line which the road seeks to abandon. The segment involved is part of the road's main line between Kansas City, Mo., and Buffalo, N. Y., and the proposed relocation would improve the physical characteristics of the track as to grade and alinement.

ABANDONMENTS

Chicago, Burlington & Quincy.—Division 4 of the Interstate Commerce Commission has denied a petition wherein the Brotherhood of Railroad Trainmen sought to have employee-protection conditions added to the division's December, 1943, order authorizing abandonment by this road of a 24-mile line between Tecumseh Junction, Neb., and Rockford, a 264-ft. connecting track at Beatrice, Neb., and operation under trackage rights over the Chicago, Rock Island & Pacific's 8.4-mile line between Rockford and Beatrice. In approving the abandonment, the commission reserved jurisdiction on the employee-protection phase; and the time limit on that reservation was twice extended until the proceeding was reopened by a December 12, 1947, order issued in response to the B. R. T. petition. The proceeding is Finance Docket No. 14146, and the division adopted the proposed report of Examiner A. G. Nye (see *Railway Age* of October 23, page 48). The decision represented the view of Commissioners Mahaffie and Miller, the report having noted that the division's third member, Commissioner Mitchell, did not participate.

Missouri & Arkansas.—The Interstate Commerce Commission has refused to set aside an August 9 order by its Division 4 which authorizes this road to abandon its entire line of approximately 335 miles and operations under trackage rights over approximately 30 miles of other roads (see *Railway Age* of August 14, page 81). This action was taken in a recent order wherein the commission overruled motions filed on behalf of the state of Arkansas for

annulment of the division's determination. At the same time, however, the order further postponed, from December 7 until August 6, 1949, the effective date of the abandonment certificate. In that connection, the commission said that "some prospective purchasers are interested in aquiring certain portions" of the road for continued operation, and the further postponement of the certificate's effective date "will enable all parties to make necessary arrangements whereby operation may be resumed . . . pursuant to the conditions outlined in said . . . certificate." The latter was a reference to the requirement that the road, or any part of it, be sold to any responsible party offering to purchase it for continued operation and willing to pay not less than the net salvage value. The commission's order came after the reargument which it heard after it reopened the proceeding (Finance Docket No. 15470) for that purpose (see *Railway Age* of October 16, page 86).

New York, Susquehanna & Western.—The Interstate Commerce Commission has postponed, from December 21 until February 16, 1949, the further hearing on this road's application for a certificate stipulating that public convenience and necessity permit the abandonment of operations under trackage-rights agreements it now has with the New York Central, covering three short switching lines in the Edgewater-Wehawken area of New Jersey. The further hearing, to be held at New York before Examiner H. H. Wilkinson, will be on the matter of "just compensation" for the Susquehanna under the trackage agreements, the commission having deferred action on the abandonment proposal for the purpose of receiving such evidence (see *Railway Age* of December 4, page 67).

Wabash.—Examiner A. G. Nye has recommended in a proposed report that Division 4 of the Interstate Commerce Commission approve this road's plans for relocating a section of its line from a point about 2 miles east of Baylis, Ill., to a point about 2 miles west of Barry. The relocation would involve abandonment of the present 11.3-mile line, and that is opposed by Barry and Baylis interests because those stations on the proposed new 11.2-mile line would be 3 and 1 miles, respectively, from the center of the communities. The examiner would have the commission approve the abandonment because it "will not deprive anyone of rail service," and because "inconvenience" or "added trucking expense" to parties accustomed to having the rail facilities nearby do not comprise "sufficient ground for denying" that part of the application.

Division 4 of the Interstate Commerce Commission has **authorized:**

Clarion River.—To abandon its entire line, extending from a connection with the Baltimore & Ohio at Carman, Pa., to Hallton, 11.1 miles. The road recently lost the only business it had when its parent corporation, the Susquehanna Chemical Company, abandoned operation of a Hallton plant which is now being dismantled.

Application has been filed with the I.C.C. by:

Kentucky & Tennessee.—To abandon the 8.3-mile section of its main line between White Oak Junction, Ky., and Bell Farm.

FINANCIAL

Central of New Jersey.—*Reorganization.*—The Interstate Commerce Commission has reopened this road's reorganization proceeding (Finance Docket No. 12620) for the sole purpose of hearing evidence in support of the application of counsel for the Watters Bondholders Committee for an allowance of compensation and expenses out of the debtor's estate. The reopening order said that Edwin M. Slote, of counsel for the committee, was absent from the country and thus unable to appear at the October 27 hearing on other like applications. The time and place of the further hearing will be fixed by Secretary W. P. Bartel of the commission. This proceeding, which is under section 77 of the Bankruptcy Act, has been suspended by the court insofar as it relates to reorganization plans, the suspension having been ordered to permit the road to proceed with it pending application, in Finance Docket No. 16211, for authority to effect a voluntary readjustment of its capital structure under provisions of the so-called Mahaffie Act.

Chicago Great Western.—*Stock and Income Debentures.*—The Interstate Commerce Commission has reopened for further hearing the proceeding (Finance Docket No. 16068) in which this road is an applicant for authority to issue $7,322,080 of 4½ per cent income debentures and 73,221 shares of $50-par common stock to be offered to holders of its outstanding 5 per cent preferred stock in exchange for their holdings. As noted in the *Railway Age* of June 26, page 136, the commission has received from Examiner H. C. Howard a proposed report recommending that the application be denied. The reopening was in response to a petition wherein the applicant sought such action so that it might offer further evidence in lieu of filing exceptions to the proposed report. The petition said that the further evidence will relate to matters which have arisen since the previous hearing was closed, including: The "material reduction" in the applicant's outstanding debt; a "new determination of the necessity for rehabilitating" its properties; and the "probable market values of the preferred and common stocks and proposed debentures." The further hearing will be held on January 4, 1949, at Washington, D.C., with Examiner G. M. Eddy sitting with Examiner Howard.

Illinois Terminal. — *Dividend.* — This road has declared a quarterly dividend of 20 cents a share on its common stock, payable February 1 to stockholders of record January 10. The previous quarterly payment was 18 cents a share on November 1.

Piedmont & Northern.—*Dividend.*—This road has declared an extra dividend of $2 a share on its common stock, payable January 20 to stockholders of record January 5.

Wisconsin Central. — *Reorganization.* — Division 4 of the Interstate Commerce Commission has set back for another year—until December 19, 1949,—the termination date of the deposit agreement under which Joseph R. Warner, Samuel S. Hall, Jr., and Frederick W. Walker function as a protective committee in this road's reorganization proceeding. The committee represents holders of the road's first general-mortgage, 50-year, 4 per cent, gold bonds, due July 1, 1949.

Annual Reports

Chicago Great Western.—*Annual Report.*—Operating revenues of this road last year totaled $31,325,023, compared with $27,105,784 in 1946. Operating expenses amounted to $24,613,702, compared with $23,093,675. Fixed charges were $727,934, compared with $816,151. Net income was $687,668, compared with $173,487. Current assets at the end of the year were $12,237,810, compared with $11,669,643. Current liabilities were $6,857,993, compared with $5,256,267. Long term debt was $22,680,300, compared with $22,058,230.

Chicago, Indianapolis & Louisville.—*Annual Report.*—Operating revenues of this road in 1947 were $15,586,376, compared with $11,457,996 in the preceding year. Operating expenses were $12,814,319, compared with $10,264,258. Fixed charges totaled $743,498, compared with $811,968. Net deficit was $105,325, compared with a net deficit of $1,202,996. Current assets at the end of the year amounted to $9,278,982, compared with $11,458,547. Current liabilities were $3,922,478, compared with $3,621,527. Long term debt was $21,754,400, compared with $15,829,321.

Duluth, South Shore & Atlantic.—*Annual Report.*—Operating revenues of this road last year amounted to $5,517,693, compared with $4,200,927 in 1946. Operating expenses totaled $4,443,737, compared with $3,833,582. Fixed charges were $900,070, compared with $895,536. The net deficit was $335,476, compared with a net deficit of $892,118. Current assets at the end of the year were $4,684,728, compared with $4,313,562. Current liabilities were $746,041, compared with $642,575. Equipment obligations outstanding at the end of the year were $302,192, compared with $522,245. Long term debt in default was unchanged at $23,000,000.

Illinois Central.—*Annual Report.*—Operating revenues of this road last year were $242,154,670, compared with $211,-117,845 in 194[illegible]. Operating expenses were $184,150,070, compared with $168,-229,162. Fixed charges were $10,749,-403, compared with $11,395,329. Net income was $15,039,441, compared with $7,462,574. Current assets at the end of the year amounted to $108,759,149, compared with $101,252,765. Current liabilities were $69,430,392, compared with $59,585,991. Funded debt was $229,595,970, compared with $241,874,-170.

International-Great Northern. — *Annual Report.* — Operating revenues of this road in 1947 were $30,147,754, compared with $26,869,271 in the preceding year. Operating expenses were $25,-342,858, compared with $23,318,452. Fixed charges totaled $2,781,271, compared with $2,770,854. The net deficit was $1,206,609, compared with a net deficit of $2,200,672. Current assets at the end of the year amounted to $14,-672,795, compared with $15,891,334. Current liabilities were $6,082,682, compared with $6,978,676. Long term debt was $52,428,779, compared with $50,-424,884.

Kansas City Southern.—*Annual Report.*—Operating revenues of this road in 1947 were $35,168,170, compared with $30,043,046 in the preceding year. Operating expenses were $20,614,669, compared with $19,478,307. Fixed charges were $2,272,414, compared with $2,238,-532. Net income was $5,809,314, compared with $3,680,194. Current assets at the end of the year totaled $17,114,215, compared with $25,650,948. Current liabilities amounted to $14,952,798, compared with $23,134,193. Long term debt was $52,034,805, compared with $49,-647,074.

Louisiana & Arkansas.—*Annual Report.*—Operating revenues of this road last year amounted to $16,286,949, compared with $13,455,624 in 1946. Operating expenses totaled $9,880,644, compared with $8,816,278. Fixed charges were $609,774, compared with $625,700. Net income was $1,999,642, compared with $1,635,721. Current assets at the end of the year were $11,032,552, compared with $9,586,464. Current liabilities were $4,522,736, compared with $3,722,849. Long term debt was $15,435,813, compared with $15,277,500.

Missouri-Kansas-Texas.—*Annual Report.*—Operating revenues of this road last year amounted to $68,816,971, compared with $60,732,982 in 1946. Operating expenses totaled $53,440,065, compared with $48,601,622. Fixed charges were $2,549,083, compared with $2,199,547. Net income was $2,820,325, compared with $1,715,446. Current assets at the end of the year were $19,625,670, compared with $18,925,914. Current liabilities were $14,703,769, compared with $14,044,277. Long term debt was $72,-122,823, compared with $68,683,018.

New Orleans, Texas & Mexico.—*Annual Report.*—Operating revenues of this company last year amounted to $40,-357,496, compared with $36,908,801 in 1946. Operating expenses totaled $27,-811,993, compared with $25,417,886. Fixed charges were $2,792,946, compared with $2,809,445. Net income was $3,729,539, compared with $3,399,794. Current assets at the end of the year were $14,301,443, compared with $20,-353,004. Current liabilities were $9,311,-887, compared with $6,880,294. Long term debt was $61,428,541, compared with $60,692,343.

New Securities

Applications have been filed with the Interstate Commerce Commission by:

Florida East Coast.—To assume liability for $2,060,000 of equipment trust certificates, series K, to finance in part the acquisition of 10 Diesel-electric locomotives from the Electro-Motive Division of General Motors Corporation. Four of the locomotives, costing $474,-882 each, will be 4,500-hp. road freight locomotives, each consisting of two 1,500-hp. "A" units and one 1,500-hp. "B" unit; the other six costing $143,-463 each, will be 1,500-hp. branch-line switching locomotives. The certificates would be dated January 1, 1949, and would mature in 20 semi-annual installments of $103,000 each, beginning July 1, 1949. They would be sold on the basis of competitive bids, and the interest rate would be fixed by such bids.

Illinois Central.—To assume liability for $6,400,000 of equipment trust certificates, series BB, to finance in part the acquisition of 1,750 50-ton steel hopper cars from the Pullman-Standard Car Manufacturing Company at a unit cost of $4,591. The certificates would be dated January 1, 1949, and would mature in 20 semi-annual installments of $320,000 each, beginning July 1, 1949. They would be sold on the basis of competitive bids, and the interest rate would be fixed by such bids.

Division 4 of I.C.C. has **authorized:**

Bangor & Aroostook.—To assume liability for $2,100,000 of equipment trust certificates, series N, to finance in part the acquisition of 14 Diesel-electric locomotives and 100 freight cars (see *Railway Age* of November 6, page 68. The certificates will be dated December 1, and will mature in 15 annual installments of $140,000 each, beginning December 1, 1949. The report approves a selling price of 98.3199 for the issue with a 2½ per cent interest rate—the bid of Halsey, Stuart & Co. which had been accepted subject to commission approval and which will make the average annual interest cost approximately 2.77 per cent. The certificates were reoffered to the public at prices yielding from 1.55 per cent to 2.9 per cent, according to maturity.

Average Prices Stocks and Bonds

	Dec. 14	Last week	Last year
Average price of 20 representative railway stocks	44.10	44.07	47.12
Average price of 20 representative railway bonds	87.73	87.98	85.06

Dividends Declared

Camden & Burlington County.—75¢, semi-annually, payable January 3, 1949, to holders of record December 15.

Delaware.—$1.00, semi-annually, payable January 3, 1949, to holders of record December 15.

East Pennsylvania.—$1.50, semi-annually, payable January 18, 1949, to holders of record December 31.

Illinois Terminal.—(increased quar.) 20¢, payable February 1, 1949, to holders of record January 10, 1949.

Maine Central. — 6% preferred, $1.50, quarterly January 3, 1949, to holders of record December 27.

Mahoning Coal.—common, $12.50, payable December 30 to holders of record December 20; 5% preferred, $1.25, semi-annually, payable January 3, 1949, to holders of record December 23.

New York Central.—(resumed), 50¢, payable January 15, 1949, to holders of record December 22.

Norwich & Worcester. — 8% preferred, $2.00, quarterly, payable January 3, 1949, to holders of record December 15.

Seaboard Air Line.—(initial) $1.00, payable December 31 to holders of record December 17.

Texas & Pacific.—$1.00, payable December 28 to holders of record December 20.

West Jersey & Seashore.—$1.50, semi-annually, payable January 3, 1949, to holders of record December 15.

Western New York & Pennsylvania.—common, $1.50, semi-annually; 5% preferred, $1.25, semi-annually; both payable January 3, 1949, to holders of record December 31.

RAILWAY OFFICERS

EXECUTIVE

John P. Morris, whose appointment as assistant to operating vice-president of the Atchison, Topeka & Santa Fe at Chicago, was reported in the *Railway Age* of November 20, was born on March 16, 1890, at Fort Madison, Iowa. He entered railroad service in 1904 as a machine operator for the Santa Fe at Shopton, Iowa, and subsequently served as machinist apprentice, machinist, machinist gang foreman, roundhouse foreman and general foreman. He was appointed master mechanic of the road's Illinois division in 1924, and in 1937 was promoted to mechanical assistant at Chicago. Mr. Morris became mechanical superintendent at Shopton in 1938 and general mechanical assistant at Chicago in 1939. He was serving in the latter position at the time of his recent promotion.

John P. Morris

William J. Wilkins, whose election as vice-president of the Cincinnati, New

Orleans & Texas Pacific (part of the Southern System) at Cincinnati, Ohio, and whose appointment as executive general agent of the Southern at that point, effective January 1, 1949, was reported in the *Railway Age* of December 4, was born at Roanoke, Va., on October 22, 1898. He attended New York University and joined the Southern in 1926 as a student clerk in the traffic department at Washington, D. C. Mr. Wilkins was promoted to freight traffic representative at New York in 1927, and subsequently served there as commercial agent and as district freight and passenger agent. He was transferred to St. Louis, Mo., in 193[illegible],

William J. Wilkins

and was appointed assistant freight traffic manager at Memphis, Tenn., in 1939. In the following year he returned to New York as eastern traffic manager, and was promoted to western traffic manager at St. Louis in 1943. Mr. Wilkins was further advanced on January 1, 1944, to freight traffic manager at Cincinnati, the post he held at the time of his recent advancement.

George R. Gregg, general traffic manager of the Chicago Great Western at Chicago, has been elected vice-president in charge of traffic at that point.

George H. Kerr, who will retire on December 31 as vice-president of the Cincinnati, New Orleans & Texas Pacific (part of the Southern System) at Cincinnati, Ohio, as was noted in the *Railway Age* of December 4, was born at Homer City, Pa., on December 4, 1878. Mr. Kerr was educated in public and private schools in Pennsylvania and taught school for two years prior to his employment in 1900 as a clerk with the Pennsylvania at Bessemer, Pa. He subsequently served with that road in various capacities until 1907, when he joined the Southern as traveling freight agent at Pittsburgh, Pa. He was appointed commercial agent at Pittsburgh in 1913 and was transferred later to Atlanta, Ga., where he was advanced in 1917 to assistant general freight agent. Mr. Kerr next served successively as traffic manager of the Southeastern Express Company, assistant freight traffic manager of the Southern, freight traffic manager at Cincinnati and as-

George H. Kerr

sistant vice-president—traffic at Washington, D. C. He has held the post of vice-president at Cincinnati since February 1, 1940.

FINANCIAL LEGAL and ACCOUNTING

Arthur J. Wallander, whose promotion to auditor of capital expenditures of the Chicago, Milwaukee, St. Paul & Pacific at Chicago, was reported in the *Railway Age* of November 6, was born on March 3, 1891, at St. Paul, Minn. Mr. Wallander studied engineering with the International Correspondence Schools and attended the Walton School of Commerce in Chicago, where he studied accounting. He entered the Milwaukee Road's service in 1910 at Minneapolis, Minn., serving successively as chairman, rodman, draftsman and instrumentman on maintenance and construction. He next served in the road's valuation department, and in 1920 was appointed assistant engineer in its accounting department at Chicago. Mr. Wallander went to Milwaukee, Wis., as construction accountant in 1927, returning to Chicago in 1932 as assistant auditor of investments. He was advanced to general accountant in 1942 and to assistant auditor of capital expenditures in 1945. He was serving in the latter post at the time of his recent appointment.

Robert E. Northup has been appointed general attorney of the Seaboard Air Line at Norfolk, Va. Mr. Northup was formerly assistant general attorney and assistant secretary of the Rheem Manufacturing Co.

C. E. Nottingham, acting general auditor of the Fort Worth & Denver City and the Wichita Valley at Fort Worth, Tex., has been elected general auditor. **C. H. Fitzhugh** has been advanced to auditor of the two roads, the post held by Mr. Nottingham prior to his appointment as acting general auditor on November 15, as noted in the *Railway Age* of December 4.

Edward T. Reidy, assistant secretary of the Chicago Great Western at Chicago, has been appointed secretary there, succeeding to a portion of the duties performed by **B. F. Parsons,** vice-president and secretary, who continues as vice-president.

Edward S. Gentle, whose appointment as general auditor of the Indiana Harbor Belt, the Chicago River & Indiana and the Chicago Junction, at Chicago, was reported in the *Railway Age* of December 4, was born on April 27, 1883, at Creston, Iowa. He entered railway service in 1902 with the Chicago Burlington & Quincy, in the office of car accountant. In 1906 he became employed as clerk in the accounting department of the Chicago, Rock Island & Pacific, and later advanced to the position of district accountant of the central district, Chicago to Denver, with headquarters at Davenport, Iowa. In January, 1912, he was made chief clerk to the auditor of disbursements at Chicago, and in May of that year he became auditor of the Chicago River & Indiana. During the period of government control, Mr. Gentle served as federal auditor for the Chicago River and the Chicago Junction. When the New York Central acquired those roads in May, 1922, he was appointed auditor, with headquarters at the Union Stock Yards, Chicago. In 1935 he also became auditor of the Indiana Harbor Belt, with offices at the La Salle Street station, and was serving as auditor of the three properties at the time of his recent appointment as general auditor.

OPERATING

Robert H. Lewis, whose appointment as superintendent of the Kent division of the Erie at Marion, Ohio, was reported in the *Railway Age* of October 2, was born at Columbus, Ohio, and attended schools in Cleveland, Ohio. Mr. Lewis entered the service of the Erie as material inspector in 1927 and the following year he became A.A.R. inspector. He was appointed division car foreman at Huntington, Ind., in 1935, and inspector of operation at Cleveland in 1941. He became trainmaster at Hornell, N.Y., in 1941, transferring to the Meadville and the Buffalo & South Western divisions in 1944, and to Marion in 1945. He was named superintendent of transportation at Cleveland in 1947, which position he held until his recent appointment as superintendent of the Kent division.

D. C. Hartley, whose promotion to superintendent of the Canadian Pacific at Regina, Sask., was reported in the *Railway Age* of November 6, began his career with the C. P. as a junior clerk

in the baggage department at Moose Jaw, Sask., in 1913. Mr. Hartley was transferred two years later to the operating department, and served in various clerical positions until his appointment in 1939 as night yardmaster at

D. C. Hartley

Swift Current, Sask. He was appointed general yardmaster in 1940, and in 1941 was transferred to Brandon, Man. Mr. Hartley became acting assistant superintendent of the road's Portage division in 1943, being transferred later in the same year to Souris, Man. In 1944 he was appointed assistant superintendent at Vancouver, B. C., where he was located at the time of his recent appointment.

G. R. Bowman, whose appointment as assistant general superintendent of the New York, Chicago & St. Louis at Bellevue, Ohio, was reported in the *Railway Age* of November 27, was born on September 10, 1893, at New Haven, Ind. Mr. Bowman entered railroad service on October 20, 1910, with the Nickel Plate as a clerk at North Findlay, Ohio. After serving in various

G. R. Bowman

other capacities, he became trainmaster of the Buffalo division at Conneaut, Ohio, on February 16, 1942, transferring to the Cleveland division on March 1, 1944. Mr. Bowman was appointed assistant superintendent of the Buffalo-Cleveland division at Conneaut on October 10, 1944, becoming superintendent of that division on September 1, 1946.

William E. Curley, whose appointment as terminal superintendent of the Illinois Central at Chicago was reported in the *Railway Age* of November 27, first joined the I. C. as a messenger boy in 1909. Mr. Curley subsequently held various clerical positions until 1925, when he was appointed trainmaster at Fordham yard, Chicago. From 1926 to 1932, he was successively assistant general yardmaster and assistant trainmaster on the Chicago terminal, and in

William E. Curley

1932 he was promoted to trainmaster. During World War II he served on the staff of the Office of Defense Transportation at Chicago. In 1944 Mr. Curley was appointed assistant superintendent of passenger service on the Chicago terminal, and in 1945 was advanced to terminal superintendent at East St. Louis, Ill. He returned to Chicago on March 1 of this year as superintendent of freight service, which position he held at the time of his recent appointment.

N. A. Peters, supervisor of car service of the Central region of the Canadian National, has been appointed superintendent of car service of that region, with headquarters at Toronto, Ont.

The St. Louis-San Francisco has announced the following changes in its operating department: **H. M. Cloud,** assistant superintendent at Springfield, Mo., promoted to superintendent of terminals at St. Louis, Mo.; **J. F. Lick,** assistant superintendent at Newburg, Mo., transferred to Springfield; **L. W. Menk,** assistant superintendent at Chaffee, Mo., transferred to Newburg; and **A. H. Taff,** appointed assistant superintendent at Chaffee.

Herbert P. Thinnes, assistant trainmaster of the New York, Chicago & St. Louis at Fort Wayne, Ind., has been appointed assistant superintendent of the Lake Erie & Western District, with headquarters at Muncie, Ind., succeeding **Z. T. Komarek,** who, as reported in the *Railway Age* of November 27, was recently advanced to superintendent at that point. **A. J. Snyder,** assistant engineer at Conneaut, Ohio, has been promoted to transportation engineer in the operating department, with headquarters at Bellevue, Ohio, succeeding **Howard B. Wodock,** who has been appointed assistant trainmaster at Muncie.

O. H. Zimmerman, Jr., formerly trainmaster of the Illinois Central at Fort Dodge, Iowa, has been transferred to Louisville, Ky., succeeding **S. C. Jones,** whose promotion to terminal superintendent at East St. Louis, Ill., was reported in the *Railway Age* of November 27. Mr. Zimmerman is replaced by **S. M. Frank.**

TRAFFIC

E. A. Groves, whose appointment as district freight traffic manager of the Chicago, Rock Island & Pacific, with headquarters at San Francisco, Cal., was reported in the *Railway Age* of November 6, was born June 12, 1883, at Marietta, Ga. He began his railroad career in 1902 as a stenographer in the office of the general agent of the Chicago, Burlington & Quincy at Atlanta, Ga., and subsequently served that road as traveling freight agent. He was traveling freight agent for the Ocean Steamship Company during 1909, and

E. A. Groves

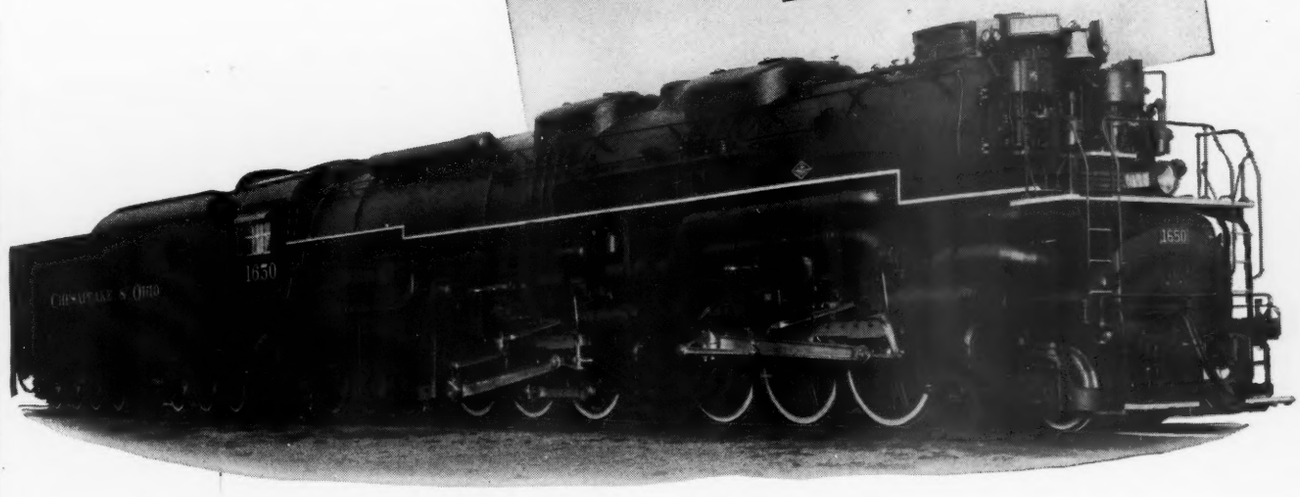
in the following year joined the Rock Island in the same position. Following army service as a Major in the U. S. Infantry during World War I, Mr. Groves re-entered the service of the Rock Island as general agent at New Orleans, La., remaining in that post until his appointment in 1927 as assistant general freight agent at Chicago. He was further promoted to general freight agent at San Francisco in 1930 and to assistant western freight traffic manager there in 1942. He was

News Department continued on next left-hand page

NEW STEAM LOCOMOTIVES

now entering service on...

the C & O



LIMA-HAMILTON is currently delivering 15 additional 2-6-6-6 locomotives to the Chesapeake and Ohio.

These locomotives are Class H-8. On dynamometer tests, this class . . .

- ***Developed a drawbar pull of 117,500 lbs.***
- ***Developed an instantaneous drawbar horsepower of 7498 at 46 mph, and sustained drawbar horsepowers of 6700 to 6900 at speeds of 42 and 46 mph.***
- ***Accelerated 160 loaded cars (14,083 tons) from dead stop to 19 mph in one mile, and reached 29 mph in 11 minutes.***

These 15 make up our fifth order from the Chesapeake & Ohio for Class H-8 locomotives — for a total of 60. This is proof in itself of the capable job that they are doing.

LIMA HAMILTON CORPORATION

DIVISIONS: *Lima, Ohio*—Lima Locomotive Works Division; Lima Shovel and Crane Division. *Hamilton, Ohio*—Hooven, Owens, Rentschler Co.; Niles Tool Works Co. *Middletown, Ohio* — The United Welding Co.

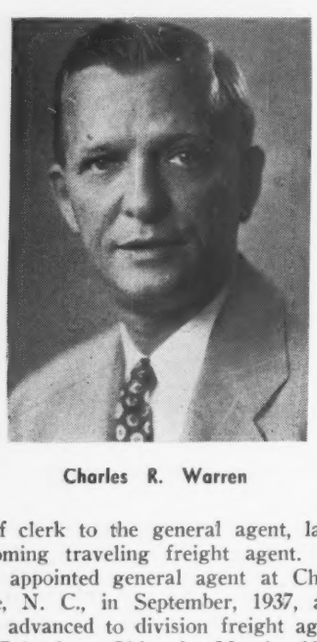
PRINCIPAL PRODUCTS: Locomotives; Cranes and shovels; Niles heavy machine tools; Hamilton diesel and steam engines; Hamilton heavy metal stamping presses; Hamilton-Kruse automatic can-making machinery; Special heavy machinery; Heavy iron castings; Weldments.

serving in the latter post at the time of his recent appointment.

Paul Wilson, whose appointment as general freight agent of the Chicago, Milwaukee, St. Paul & Pacific at Seattle, Wash., was reported in the *Railway Age* of October 2, was born at Butler, Mo., on June 20, 1890. He entered service with the Milwaukee in 1911, advancing to freight agent at Seattle in 1920. He served as division freight and passenger agent at Green Bay, Wis., from 1925 to 1929, and in the latter year was transferred to Tacoma, Wash. Mr. Wilson returned to Seattle in 1935 as assistant general freight agent, which position he held at the time of his recent appointment.

E. A. Compton, general southwestern agent of the Illinois Terminal at Dallas, Tex., has been promoted to western traffic manager at San Francisco, Cal. **D. B. Powell,** general agent at Tulsa, Okla., has been appointed to succeed Mr. Compton. **R. A. Lovelace** has been made general agent at Tulsa, succeeding Mr. Powell. **Charles W. Moore** has been appointed general agent at Chicago and **George Fiester** has been promoted to general agent at New York.

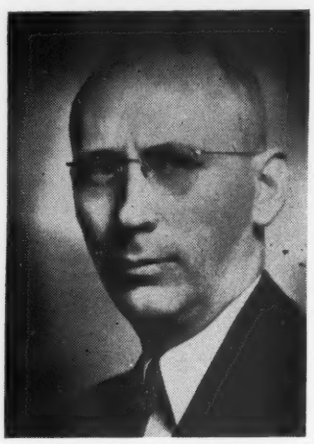
Charles R. Warren, whose appointment as industrial commissioner of the Chesapeake & Ohio at Detroit, Mich., was reported in the *Railway Age* of November 27, was born at Baltimore, Md., on August 31, 1893. He graduated from high school in that city and entered railway service there with the Baltimore & Ohio, in June, 1910, as a messenger. In 1921 he was advanced to chief rate clerk, and in December of the next year he joined the C. & O. at Baltimore as



Charles R. Warren

chief clerk to the general agent, later becoming traveling freight agent. He was appointed general agent at Charlotte, N. C., in September, 1937, and was advanced to division freight agent at Columbus, Ohio, in March, 1942. Mr. Warren became assistant general freight agent at Columbus in September, 1944, and was appointed assistant industrial commissioner at that point in March, 1947, the position he was holding at the time of his appointment as industrial commissioner at Detroit.

Frank D. Staley, whose appointment as district freight traffic manager of the Chicago, Rock Island & Pacific at Seattle, Wash., was reported in the *Railway Age* of November 6, was born on February 22, 1893, at Dayton, Mo. Upon leaving business college in 1911, he entered railway service with the Rock Island as a station helper at Henry, Ill. He subsequently served as an extra telegrapher and agent at var-



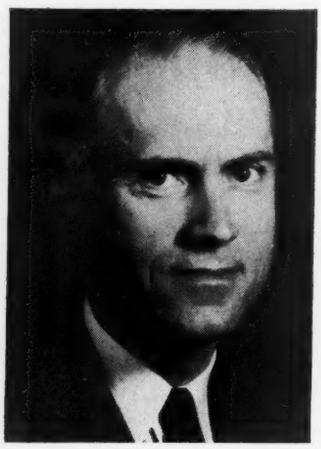
Frank D. Staley

ious stations in Illinois until December, 1936, when he entered the traffic department as traveling freight agent at Davenport, Iowa. In November, 1940, Mr. Staley was appointed assistant dairy agent at Chicago, where he also served as general dairy agent from 1941 to 1946. He was further advanced to assistant general freight agent in the latter year, and was serving in that post at the time of his recent appointment.

Ernest E. Bogardus, district passenger agent of the Chicago & North Western at Chicago, has retired after nearly 50 years of service.

Richard A. Anderson has been appointed general agent of the Union Pacific at Pocatello, Idaho.

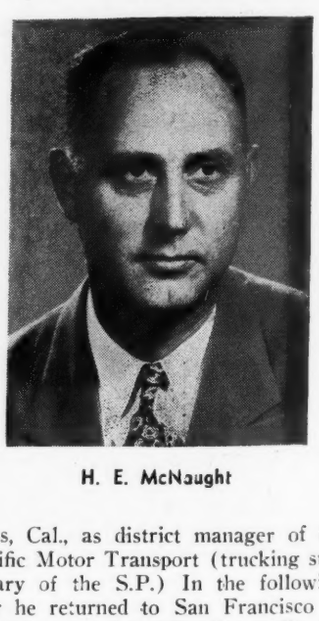
Charles W. Gowl, whose appointment as eastern traffic manager of the Southern at New York was reported in the *Railway Age* of December 4, was born at Harrisonburg, Va., on September 12, 1905. Mr. Gowl was graduated from the University of Virginia in 1928 and entered the employ of the Southern in August, 1928, as a clerk at Washington, D. C. In October, 1929, he advanced to rate clerk in the office of the division freight agent at Columbia, S. C., and in February, 1930, he was appointed chief clerk to the district freight agent at Cincinnati, Ohio. Mr. Gowl was promoted to special freight traffic representative at New York in August, 1930, and subsequently served there as traveling freight and passenger agent, district freight and passenger agent, and as general eastern freight agent. He was appointed assistant general freight agent at Birmingham, Ala., in Novem-



Charles W. Gowl

ber, 1942, and was promoted to assistant freight traffic manager there in March, 1945, which position he held until his recent appointment as eastern traffic manager.

H. E. McNaught, whose appointment as manager of perishable freight traffic for the Pacific Lines of the Southern Pacific, with headquarters at San Francisco, Cal., was reported in the *Railway Age* of December 11, began his service with the S. P. in 1920. He subsequently advanced through various positions in the district freight office at San Francisco, and in 1934 he went to Los An-



H. E. McNaught

geles, Cal., as district manager of the Pacific Motor Transport (trucking subsidiary of the S.P.) In the following year he returned to San Francisco as general agent of merchandise traffic for the railroad. Mr. McNaught advanced to district freight agent at Salinas, Cal., in 1940 and to district freight and passenger agent at Fresno, Cal., in 1945. He was serving in the latter capacity at the time of his recent appointment.

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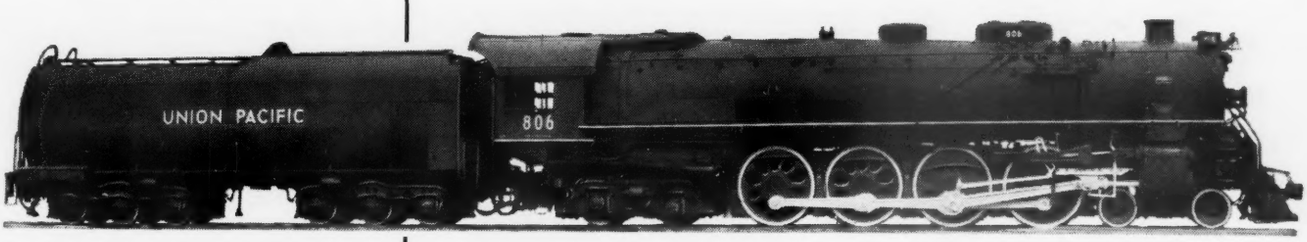
A LOCOMOTIVE
that started a trend



Fifty-nine roads use Compensators and Snubbers to reduce maintenance costs. These twenty roads use them on Roller Bearing Locomotives:

A. T. & S. F.
C. & N. W.
C. M. St. P. and P.
Clinchfield
Delaware & Hudson
D. M. & I. R.
D. L. & W.
Great Northern
Missouri Pacific
Northern Pacific
N. C. & St. L.
New York Central
Norfolk & Western
Southern Pacific
S. P. & S.
Texas & Pacific
Union Pacific
Western Maryland
Railways of France
National Railways of Mexico

UNION PACIFIC

uses Compensators and Snubbers on 146 roller-bearing locomotives to cut maintenance costs.

The Franklin Automatic Compensator and Snubber established its maintenance reduction records on locomotives equipped with surface bearing driving boxes. It was Union Pacific ten years ago with its 800 class locomotives that conclusively proved that this device is equally important with roller bearings.

Since 1937 Union Pacific has equipped forty-five 4-8-4, seventy-six 4-6-6-4 and twenty-five 4-8-8-4 type locomotives with the Compensators and Snubbers and Roller Bearings. The performance record is conclusive in the reduction of maintenance and reliability of service.

Experience of 59 railroads on locomotives of widely varying types and under all varieties of operating conditions shows definitely that maintenance costs are reduced by the Compensator and Snubber because it eliminates the clearance between the driving box, or housing, and the frame, regardless of expansion or wear. Pounds are reduced, minimizing wear and failure of crank pins and rod bearings. Close fitting roller bearing assemblies are protected by the snubber because it cushions abnormal shocks. This device saves time – hours of it – since it seldom needs adjustment but which, when needed is easily made.

FRANKLIN RAILWAY SUPPLY COMPANY
A CORPORATION
NEW YORK • CHICAGO • MONTREAL

STEAM DISTRIBUTION SYSTEM • BOOSTER • RADIAL BUFFER • COMPENSATOR AND SNUBBER • POWER REVERSE GEARS
AUTOMATIC FIRE DOORS • DRIVING BOX LUBRICATORS • STEAM GRATE SHAKERS • FLEXIBLE JOINTS • CAR CONNECTION

A. J. Mahon, whose promotion to general passenger agent of the Canadian Pacific at Winnipeg, Man., was reported in the *Railway Age* of December 11, first entered the service of the C. P. in 1913. He has held various passenger department positions at Montreal, Que., and at points in Saskatchewan, and in 1936 was appointed special traffic representative at Vancouver,

A. J. Mahon

B. C. In 1941 he went to Seattle, Wash., as general agent, remaining there until 1946, when he returned to Vancouver as assistant general passenger agent. Mr. Mahon was holding the latter position at the time of his recent promotion.

MECHANICAL

Lee Robinson, superintendent of Diesel power and shop machinery of the Illinois Central at Chicago, has retired after 40 years of service. **George J. Lehnerer,** assistant to the general superintendent of equipment at Chicago, has been appointed superintendent of the car department at that point, succeeding **John A. Welsch,** who has been promoted to superintendent of equipment. **Rollin J. Chinn,** general foreman at Memphis, Tenn., has been appointed to succeed Mr. Lehnerer.

SPECIAL

Carlton T. Sills, advertising manager in the traffic department of the Denver & Rio Grande Western at Denver, Colo., has been appointed advertising and publicity manager in the public relations department at that point. **Edward A. Roe** has been appointed assistant advertising and publicity manager.

William E. Brennan, whose promotion to director of press relations for the Chicago, Rock Island & Pacific at Chicago was reported in the *Railway Age* of December 4, is a former professor of English and a graduate and former member of the faculties of Marquette and Minnesota Universities. He received his master's degree from Marquette in 1936, and was actively engaged in public relations and publicity work prior to joining the Rock Island

William E. Brennan

in 1942 as publicity manager. Mr. Brennan was serving in the latter position at the time of his recent appointment.

OBITUARY

Benton M. Hopkins, assistant real estate and tax commissioner of the Chicago, Rock Island & Pacific at Chicago, died on December 9 in St. Luke's Hospital in that city, at the age of 61.

Gordon P. Bier, assistant to the director of purchases and stores of the Illinois Central at Chicago, died on December 9 at the Illinois Central Hospital in that city after a long illness. He was born at Anna, Ill., and started to work for the I. C. upon graduation from high school in 1923. He subsequently held several clerical positions on the St. Louis and Illinois divisions, moving to the general store at Chicago in 1929. A short time later he resumed his education and over a six-year period completed his studies at Northwestern University. In 1930 he was promoted to secretary to the general storekeeper and in 1935 was further advanced to secretary to the vice-president—purchases and stores. He became a buyer in the purchasing department in 1941, and, following service in the Navy during World War II, returned to the I. C. at Chicago as office manager, purchases and stores department, in January, 1946. He was appointed assistant to the director of purchases and stores at Chicago in May, 1948, and was holding this position at the time of his death.

John H. Agate, former general attorney of the New York, Chicago & St. Louis at Cleveland, Ohio, died at his home in that city on December 5, after a long illness, at the age of 65. Mr. Agate served as general attorney of the N.Y.C. & St. L. from 1935 until January 1, 1943, when he retired due to illness.

A. W. Oberfell, general freight agent of the Chicago, South Shore & South Bend at South Bend, Ind., died recently of a heart attack at his home in that city, at the age of 63.

William Brain, general auditor of the Missouri-Kansas-Texas at St. Louis, Mo., died in that city on November 6, following a short illness. Mr. Brain was born on April 9, 1895, at Otoka, Okla., and entered the service of the Katy in September, 1911. He served in various minor capacities until February, 1919, when he was appointed shop accountant, in which capacity he served at Sedalia, Mo., and Parsons, Kan. In August, 1926, Mr. Brain was promoted to disbursements accountant and assistant to the auditor at Dallas, Tex., and in February, 1939, was appointed assistant auditor and paymaster at Parsons. He was further advanced to auditor at St. Louis in 1942 and to general auditor there in June, 1947. He was serving in the latter position at the time of his death.

A. W. Bigham, general adjuster of the Chicago, Milwaukee, St. Paul & Pacific at Chicago, died in that city on December 10, at the age of 62.

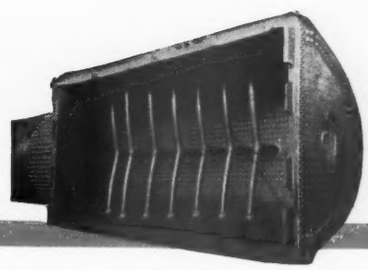
R. O. Davis, superintendent of terminals for the St. Louis-San Francisco at St. Louis, Mo., died recently.

Frank W. Robinson, who retired in 1946 as senior vice-president and a director of the Union Pacific, died on December 10 at his home in Omaha, Neb., after a long illness. Mr. Robinson entered railway service with the U. P. at Omaha in April, 1889, as a ticket sorter, and was later transferred to the freight traffic department at that point. In January, 1906, he became chief clerk to the director of traffic at Chicago. Four years later he was appointed assistant general freight agent for the Oregon-Washington Railroad & Navigation Co. (part of the U. P.) at Portland, Ore. He was subsequently made general freight agent of the U. P., advancing in 1912 to assistant to the director of traffic for the U. P. and the Southern Pacific. He returned to the Oregon-Washington Railroad & Navigation in 1913 as assistant traffic manager, and from 1915 to 1920, was traffic manager of that company. He next became freight traffic manager of the U. P., and in 1927 was elected vice-president of traffic. Mr. Robinson was elected a member of the board of directors in May, 1942, and shortly thereafter was advanced to senior vice-president, the position he was holding at the time of his retirement.

T. R. Williams, shop superintendent of the Northern Pacific at St. Paul, Minn., died on December 9.

Table of Revenues and Expenses appears on next left-hand page.

FOR EVERY TYPE OF LOCOMOTIVE BOILER



DESIGNED for any steam locomotive, whether coal or oil burning, Security Circulators are now in use in twenty-five different types, ranging from 4-4-2s to 4-8-8-4s. Installations run from three to nine Circulators each, according to the size of the locomotive.

In making such installations, either in new or in existing motive power, the Security Circulators are suitably proportioned to the size and type of boiler so as to give the best results in bettering boiler performance and increasing locomotive utilization.

SECURITY CIRCULATOR DIVISION

AMERICAN ARCH COMPANY INC.

NEW YORK • CHICAGO

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1948

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating Expenses: Maintenance of: Way and structures	Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Railway tax-accruals	Net railway operating income: 1948	1947
Akron, Canton & Youngstown	Oct.	171	495,901	75	517,613	78,525	48,452	27,564	136,439	316,006	61.1	201,607	78,607	105,988	104,249
	10 mos.	171	4,713,402	762	4,914,100	712,980	470,312	261,659	1,357,128	3,038,823	61.8	1,875,277	708,611	955,841	676,495
Atchison, Topeka & Santa Fe System	Oct.	13,080	38,477,316	4,088,024	46,788,455	6,347,524	7,802,711	1,054,971	15,760,317	32,746,448	70.0	14,042,007	6,600,678	7,451,005	5,297,790
	10 mos.	13,081	351,919,784	44,598,227	434,220,711	64,652,648	74,788,529	9,506,483	151,840,223	318,282,659	73.3	115,938,052	57,388,329	57,539,005	43,398,344
Atlanta & St. Andrews Bay	Oct.	82	202,990	1,625	211,388	27,086	19,142	6,566	51,058	114,940	54.4	96,448	33,791	44,957	30,623
	10 mos.	82	1,900,395	16,942	1,990,784	240,031	156,526	62,631	508,106	1,076,313	54.1	914,471	325,310	393,390	245,164
Atlanta & West Point	Oct.	93	303,037	47,407	395,985	51,642	49,346	14,273	202,798	340,562	86.0	55,423	28,164	7,578	204
	10 mos.	93	2,849,708	518,518	3,821,777	418,463	505,265	137,318	1,858,361	3,139,922	82.2	681,855	327,433	159,175	7,384
Western of Alabama	Oct.	133	312,955	48,073	399,958	39,936	59,173	13,840	173,547	307,739	76.9	92,219	46,930	50,899	8,763
	10 mos.	133	2,885,451	509,782	3,750,848	409,191	579,567	136,439	1,610,907	2,937,197	78.3	813,651	430,102	377,398	200,549
Atlantic Coast Line	Oct.	5,569	8,159,312	1,237,082	10,135,923	2,264,248	2,261,569	311,831	4,745,489	10,088,939	99.5	46,984	700,000	—662,309	250,056
	10 mos.	5,571	88,575,107	16,698,560	113,647,186	21,327,469	19,903,990	2,928,524	48,469,906	97,668,713	85.9	15,978,473	9,550,000	4,117,417	1,198,272
Charleston & Western Carolina	Oct.	343	388,864	8,819	412,012	76,375	80,213	14,665	173,412	356,900	86.6	55,112	25,000	22,907	—9,371
	10 mos.	343	4,081,733	47,465	4,244,993	752,398	756,477	144,014	1,700,447	3,460,266	81.5	784,727	320,000	359,255	221,895
Baltimore & Ohio	Oct.	6,191	32,173,885	2,093,447	36,201,370	4,925,074	7,511,638	776,624	14,285,063	28,902,955	79.8	7,298,415	2,683,255	4,439,722	2,598,288
	10 mos.	6,191	296,442,032	20,336,798	335,461,415	41,106,165	68,374,322	7,124,522	139,300,596	269,630,929	80.4	65,830,486	25,711,151	37,905,450	24,276,315
Staten Island Rapid Transit	Oct.	29	218,839	62,964	293,438	46,137	40,677	3,173	131,359	250,403	85.3	43,035	35,924	—14,411	—92,058
	10 mos.	29	1,884,137	989,480	3,022,239	566,607	419,063	17,738	1,555,253	2,846,811	94.2	175,428	381,384	—412,452	—507,313
Bangor & Aroostook	Oct.	602	1,104,260	53,295	1,195,978	232,886	272,150	8,991	269,118	826,961	69.1	369,017	180,578	222,777	65,799
	10 mos.	602	11,319,294	478,537	12,163,165	2,375,064	1,974,241	85,404	3,316,113	8,196,381	67.4	3,966,784	1,900,964	2,192,665	1,185,150
Bessemer & Lake Erie	Oct.	214	2,658,045	1,516	2,675,243	206,942	1,053,498	19,977	547,875	1,910,674	71.4	764,569	428,847	569,373	948,786
	10 mos.	214	22,473,681	15,315	22,653,492	1,665,106	5,866,594	189,202	4,851,268	13,282,598	58.6	9,370,894	5,137,979	6,874,594	6,739,805
Boston & Maine	Oct.	1,757	6,309,489	1,202,189	8,189,572	1,250,489	1,197,555	114,435	3,222,323	6,096,921	74.5	2,092,651	884,337	867,495	520,018
	10 mos.	1,757	58,734,215	12,495,152	78,313,635	12,939,028	11,652,038	1,037,664	32,213,074	60,904,831	77.8	17,408,804	7,237,511	6,467,773	4,723,580
Burlington-Rock Island	Oct.	228	329,222	51,608	405,872	48,385	48,772	4,933	193,339	316,812	78.1	89,060	10,457	24,637	—10,652
	10 mos.	228	3,063,125	539,735	3,812,572	496,317	390,912	47,221	1,543,958	2,677,729	70.2	1,134,843	100,140	531,446	136,551
Cambria & Indiana	Oct.	35	158,093	.....	158,163	11,315	58,163	769	26,617	106,829	67.54	51,334	75,856	100,289	66,389
	10 mos.	35	1,269,550	.....	1,270,051	116,043	847,866	7,411	233,397	1,287,850	101.40	—17,799	620,981	526,639	408,408
Canadian Pacific Lines in Maine	Oct.	234	269,190	39,064	331,530	119,966	74,761	6,752	154,637	367,357	110.8	—35,827	22,899	—105,498	—93,944
	10 mos.	234	4,128,790	375,085	4,744,825	895,070	713,168	72,403	1,913,620	3,721,987	78.4	1,022,838	230,604	115,588	—29,376
Canadian Pacific Lines in Vermont	Oct.	90	166,865	21,651	226,152	67,518	39,164	4,866	150,200	268,325	118.6	—42,173	13,988	—100,628	—166,244
	10 mos.	90	1,638,216	178,226	2,003,154	442,936	357,697	51,985	1,533,197	2,455,948	122.6	—452,794	133,818	—1,037,542	—1,098,533
Central of Georgia	Oct.	1,815	2,806,304	213,731	3,274,196	492,570	563,293	106,023	1,514,451	2,851,509	87.1	422,687	180,463	177,267	41,748
	10 mos.	1,815	26,347,130	2,534,176	31,493,165	4,916,692	5,078,277	1,022,864	14,682,372	27,352,815	86.9	4,140,350	2,266,262	1,619,607	—475,029
Central of New Jersey	Oct.	417	2,926,142	527,565	3,703,387	620,860	592,488	60,026	1,717,686	3,184,570	86.0	518,817	387,256	—173,497	—568,825
	10 mos.	417	27,877,430	5,449,066	35,760,152	5,533,710	5,827,878	542,098	17,548,564	31,320,888	87.6	4,439,264	3,988,184	—2,661,618	—3,625,503
Central of Pennsylvania	Oct.	213	1,726,115	15,224	1,785,840	151,643	335,241	24,874	532,592	1,090,506	61.1	695,334	77,313	875,182	705,941
	10 mos.	213	16,934,470	179,415	17,509,775	1,540,545	3,086,276	236,254	5,400,044	10,687,966	61.0	6,821,809	704,623	8,758,367	6,618,107
Central Vermont	Oct.	422	782,000	59,000	897,000	105,084	169,575	15,134	373,130	699,775	78.0	197,225	46,559	87,850	—24,118
	10 mos.	422	7,437,000	659,000	8,651,000	1,394,438	1,452,667	140,061	3,643,822	7,007,067	81.0	1,643,933	451,874	652,427	302,938
Chesapeake & Ohio	Oct.	5,075	28,655,778	837,696	30,848,216	4,417,865	5,671,520	610,576	10,573,036	22,524,292	73.0	8,323,924	3,928,929	4,859,286	4,006,480
	10 mos.	5,074	258,269,871	9,502,687	280,485,134	40,813,545	51,411,086	6,857,384	99,293,555	210,943,473	75.2	69,541,661	34,402,581	39,801,365	37,159,733
Chicago & Eastern Illinois	Oct.	909	2,330,103	312,068	2,879,251	347,994	545,822	109,152	1,152,944	2,291,837	79.1	605,414	234,600	240,044	809
	10 mos.	909	21,348,491	3,085,625	26,943,143	3,491,264	5,034,943	986,877	11,325,493	22,112,202	82.1	4,830,941	1,874,500	1,758,424	316,346
Chicago & Illinois Midland	Oct.	131	953,217	892	975,132	98,335	141,321	24,861	210,887	508,853	52.2	466,279	186,619	276,418	168,296
	10 mos.	131	7,817,913	9,086	8,023,441	901,372	1,284,111	246,474	1,936,754	4,703,909	58.6	3,319,532	1,386,490	1,926,899	1,257,812
Chicago & North Western	Oct.	8,058	14,123,891	1,949,809	17,880,220	2,713,642	2,976,579	333,840	7,784,258	14,620,484	81.8	3,259,736	1,699,656	1,087,668	1,246,051
	10 mos.	8,058	123,604,295	21,603,877	162,390,758	25,224,365	29,516,366	3,056,600	72,000,005	137,686,498	84.8	24,704,260	12,683,603	8,579,351	6,688,555
Chicago, Burlington & Quincy	Oct.	8,705	18,889,604	1,650,284	22,440,395	3,496,398	3,236,627	423,224	7,543,826	15,388,692	68.6	7,051,703	3,433,314	3,278,251	3,060,531
	10 mos.	8,835	165,767,563	16,949,537	200,513,099	30,892,179	28,934,589	3,922,793	68,994,147	139,560,416	69.6	60,952,683	29,466,963	27,486,857	26,452,249
Chicago Great Western	Oct.	1,500	3,268,330	51,114	3,553,132	585,579	383,292	120,029	1,326,990	2,527,621	71.1	1,025,511	389,986	361,347	382,266
	10 mos.	1,500	26,776,974	565,227	29,445,579	4,226,808	3,346,443	985,403	11,843,851	21,363,238	72.6	8,082,341	2,940,647	3,088,809	1,757,505
Chicago, Indianapolis & Louisville	Oct.	541	1,502,884	122,957	1,734,225	333,494	265,266	93,654	662,931	1,449,533	83.6	284,692	79,681	109,051	238,797
	10 mos.	541	13,829,051	1,008,768	15,853,743	2,619,767	2,151,129	787,257	6,097,781	12,568,335	79.3	3,285,408	763,438	1,497,619	24,230
Chicago, Milwaukee, St. Paul & Pacific	Oct.	10,671	20,261,551	1,663,319	24,208,822	3,453,527	3,987,938	359,097	9,718,066	18,480,527	76.3	5,728,295	2,691,000	2,383,527	2,340,033
	10 mos.	10,671	173,868,896	17,950,471	212,289,356	32,749,211	36,836,878	3,984,251	91,008,483	173,913,389	81.9	38,375,967	17,701,000	13,536,181	13,103,305
Chicago, Rock Island & Pacific	Oct.	7,643	13,397,932	1,846,383	16,472,424	2,367,778	2,475,572	454,871	6,300,902	12,334,760	74.9	4,137,664	1,831,885	1,720,683	1,833,543
	10 mos.	7,647	133,228,055	19,077,457	164,810,854	20,651,638	24,670,410	4,409,503	63,155,074	120,158,721	72.9	44,652,133	18,831,533	17,979,185	17,302,045
Chicago, St. Paul, Minn. & Omaha	Oct.	1,617	2,712,873	183,248	3,143,431	398,821	438,628	59,213	1,373,125	2,393,926	76.2	749,505	192,924	417,942	243,042
	10 mos.	1,617	23,750,949	2,230,795	28,299,935	4,147,797	4,295,376	562,239	13,432,688	23,625,139	83.5	4,674,796	1,834,033	1,275,472	988,859
Clinchfield	Oct.	317	1,552,087	5,291	1,570,918	138,635	278,520	31,866	472,918	951,095	60.5	619,823	164,596	543,415	541,652
	10 mos.	317	16,018,689	57,560	16,206,184	1,394,531	2,774,100	319,793	4,878,468	9,665,487	59.6	6,540,697	1,624,537	5,848,948	5,602,585
Colorado & Southern	Oct.	745	1,104,319	86,486	1,306,323	193,531	198,530	23,603	544,039	1,010,826	77.4	295,497	142,431	117,445	95,265
	10 mos.	745	9,557,856	873,325	11,434,700	1,792,874	1,944,445	236,454	4,812,412	9,298,707	81.3	2,135,993	1,210,300	645,550	396,830
Ft. Worth & Denver City	Oct.	902	1,238,015	146,042	1,500,653	177,275	182,513	37,505	581,108	1,054,839	70.3	445,814	108,012	246,392	119,695
	10 mos.	902	10,944,213	1,472,004	13,440,304	1,959,764	1,793,379	390,517	4,907,370	9,780,891	72.8	3,659,413	1,246,978	1,835,557	1,745,906

Table continued on next left-hand page.

THE
SUPERHEATER
COMPANY

Representative of AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street, NEW YORK
122 S. Michigan Ave., CHICAGO
ALCO
Montreal, Canada, THE SUPERHEATER COMPANY, LTD.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1948

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax-accruals	Net railway operating income	
			Freight	Passenger	Total (inc. misc.)	Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total				1948	1947
Colorado & Wyoming	Oct.	41	146,097	.....	228,067	12,305	17,320	375	114,187	150,618	66.0	77,449	42,483	34,800	40,266
	10 mos.	41	1,403,011	.....	2,244,221	125,735	219,384	9,362	857,456	1,274,711	56.7	969,510	408,791	556,434	332,774
Columbus & Greenville	Oct.	168	191,884	612	190,415	53 282	47,834	4,043	54,073	176,779	92.8	13,636	12,812	1,822	43,195
	10 mos.	168	1,552,079	4,948	1,643,091	398,207	288,130	48,280	502,632	1,403,630	85.4	239,461	146,416	129,639	—96,980
Delaware & Hudson	Oct.	794	5,142,501	213,650	5,500,706	624,177	1,173,156	69,378	1,931,308	3,971,459	72.2	1,529,247	710,002	825,708	690,362
	10 mos.	794	46,966,477	1,897,169	50,263,107	6,199,972	10,754,405	730,207	19,016,749	38,431,821	76.5	11,831,286	5,805,764	6,237,816	5,007,402
Delaware, Lackawanna & Western	Oct.	969	6,652,332	857,242	8,113,596	944,565	1,178,224	146,207	3,280,895	5,777,467	71.2	2,336,129	1,067,020	1,236,302	755,044
	10 mos.	972	61,439,926	8,938,586	76,509,553	9,287,343	11,789,438	1,417,753	33,141,033	57,949,444	75.7	18,560,109	8,747,566	9,178,597	6,710,435
Denver & Rio Grande Western	Oct.	2,443	6,587,207	235,497	7,094,050	711,929	1,106,741	138,850	2,462,913	4,684,564	66.0	2,409,486	965,729	1,317,326	1,236,091
	10 mos.	2,443	51,820,346	2,561,074	56,719,356	6,815,309	8,999,506	1,402,006	20,133,564	39,908,153	70.4	16,811,203	6,420,503	10,474,622	6,629,491
Detroit & Mackinac	Oct.	230	213,574	403	225,077	34,500	23,590	1,847	43,042	111,417	49.5	113,660	41,215	61,524	58,456
	10 mos.	230	1,726,135	10,581	1,852,269	334,000	213,786	15,394	363,352	1,004,667	54.2	847,602	319,932	496,956	358,321
Detroit & Toledo Shore Line	Oct.	50	555,356	.....	558,798	73,752	49,506	11,546	165,134	310,387	55.6	248,411	68,911	88,648	58,438
	10 mos.	50	5,428,900	.....	5,459,790	516,944	422,896	119,414	1,633,683	2,795,662	51.2	2,664,128	744,963	895,318	689,349
Detroit, Toledo & Ironton	Oct.	464	1,412,095	692	1,451,824	145,960	194,057	22,338	322,302	723,446	49.8	728,378	246,451	461,550	268,214
	10 mos.	464	12,430,983	8,071	12,971,511	1,439,936	2,393,722	212,516	3,212,570	7,609,781	58.7	5,361,730	2,008,798	2,988,844	2,486,917
Duluth, Missabe & Iron Range	Oct.	578	4,418,836	2,005	5,148,660	566,728	555,124	8,161	1,427,160	2,632,006	51.1	2,516,654	1,253,829	1,284,846	1,426,020
	10 mos.	571	35,721,087	27,037	41,793,298	5,248,795	4,658,307	72,993	11,019,286	21,635,201	51.8	20,158,097	9,760,618	10,411,295	9,673,992
Duluth, Winnipeg & Pacific	Oct.	175	315,000	1,600	323,700	74,568	46,133	4,029	158,054	289,172	89.3	34,528	26,456	—25,865	25,418
	10 mos.	175	3,654,000	15,700	3,722,100	717,265	472,135	35,707	1,546,949	2,830,181	76.0	891,919	293,055	152,191	182,583
Elgin, Joliet & Eastern	Oct.	238	3,419,687	8	4,084,982	379,119	546,108	26,451	1,385,166	2,447,586	59.9	1,637,396	649,560	676,224	582,281
	10 mos.	330	31,973,730	51	38,288,033	2,690,930	5,315,724	264,628	13,687,036	22,959,598	60.0	15,328,435	5,906,308	6,573,111	4,587,301
Erie	Oct.	2,229	14,537,344	650,948	16,202,844	1,916,361	2,245,883	339,965	6,225,591	11,392,221	70.3	4,810,623	1,798,529	2,387,403	1,510,613
	10 mos.	2,229	130,067,576	6,858,150	146,627,962	17,325,727	22,917,144	3,012,599	59,222,531	108,853,147	74.2	37,774,815	16,153,761	16,709,335	8,984,380
Florida East Coast	Oct.	575	1,252,729	395,484	1,813,246	387,531	435,003	64,077	787,735	1,817,381	100.2	—4,135	158,996	—218,919	—419,948
	10 mos.	575	15,558,239	6,050,953	23,775,599	3,799,190	4,190,131	641,068	9,632,366	19,980,085	84.0	3,795,514	1,410,332	1,402,886	198,880
Georgia Railroad	Oct.	326	712,116	32,000	794,574	105,811	106,195	27,476	378,689	648,073	81.6	146,501	25,276	121,992	46,791
	10 mos.	326	6,556,782	337,709	7,363,781	951,619	1,045,493	273,348	3,523,773	6,066,849	82.4	1,296,932	348,768	1,082,667	529,442
Georgia & Florida	Oct.	408	237,722	1,986	244,795	58,005	41,812	13,505	112,133	234,837	95.9	9,958	14,597	—20,639	—44,276
	10 mos.	408	2,282,404	19,930	2,360,972	598,306	335,339	130,117	997,148	2,145,852	90.9	215,120	142,557	—75,911	—140,325
Grand Trunk Western	Oct.	972	4,446,000	212,000	4,979,000	684,221	767,461	63,994	1,933,192	3,605,605	72.4	1,373,395	223,313	1,067,795	241,765
	10 mos.	972	38,318,000	1,871,000	43,061,000	6,624,963	7,236,496	596,124	18,927,163	34,940,328	81.1	8,120,672	2,219,675	4,542,877	2,833,205
Canadian Nat'l Lines in New Engl.	Oct.	172	200,000	6,000	236,000	62,965	32,578	3,103	134,019	242,585	102.8	—6,585	21,648	—60,445	—88,916
	10 mos.	172	1,743,000	102,300	1,987,000	701,642	383,593	28,206	1,274,055	2,469,075	124.2	—482,075	216,471	—1,036,217	—946,967
Great Northern	Oct.	8,336	22,508,906	1,044,448	25,160,584	3,229,303	3,038,502	347,090	7,406,515	14,637,573	58.2	10,523,011	4,568,743	5,478,022	4,586,269
	10 mos.	8,333	155,661,417	10,430,405	180,193,513	31,217,858	28,071,741	3,271,782	65,471,947	134,091,632	74.4	46,101,881	19,206,788	24,340,909	20,081,257
Green Bay & Western	Oct.	234	339,181	—19	348,956	102,978	32,876	18,861	96,488	265,292	76.0	83,664	34,780	28,746	10,727
	10 mos.	234	3,007,126	317	3,077,489	819,616	327,476	180,501	920,038	2,392,699	77.7	684,790	320,669	189,726	92,993
Gulf, Mobile & Ohio	Oct.	2,905	6,329,991	412,299	7,220,591	1,069,021	1,135,241	233,345	2,256,734	5,029,233	69.7	2,191,358	879,123	1,002,257	663,609
	10 mos.	2,905	57,478,502	5,243,684	67,248,304	11,373,998	11,139,029	2,222,590	21,410,000	49,327,603	73.4	17,920,701	6,964,477	7,779,773	5,799,971
Illinois Central	Oct.	6,550	20,137,337	2,137,544	24,549,036	4,182,549	4,177,677	451,961	8,428,223	18,193,321	74.1	6,355,715	3,094,088	2,974,169	2,242,071
	10 mos.	6,566	177,337,668	21,393,395	221,626,439	36,710,297	37,691,755	4,267,442	79,780,693	167,636,334	75.6	53,990,105	26,988,722	24,439,052	20,488,441
Illinois Terminal	Oct.	474	1,071,155	119,257	1,315,057	171,667	142,096	38,098	438,374	831,842	63.26	483,215	212,736	223,290	203,825
	10 mos.	474	8,861,109	1,219,348	11,143,138	1,574,400	1,368,290	297,339	3,982,615	7,608,331	68.28	3,534,807	1,519,014	1,697,876	1,495,049
Kansas City Southern	Oct.	890	3,420,750	92,002	3,815,673	295,517	435,965	125,493	976,011	1,951,663	51.2	1,864,010	707,000	990,393	757,937
	10 mos.	890	30,818,379	975,943	34,320,214	2,788,319	3,996,489	893,113	9,452,773	18,320,167	53.4	16,000,047	6,083,000	8,515,908	6,013,487
Kansas, Oklahoma & Gulf	Oct.	328	541,352	835	545,860	53,581	35,809	16,772	136,837	261,045	47.8	284,815	122,203	126,794	55,276
	10 mos.	328	4,745,464	9,164	4,794,531	555,765	367,116	162,510	1,298,353	2,559,508	53.4	2,235,023	953,606	897,247	807,671
Lake Superior & Ishpeming	Oct.	156	311,061	51	380,378	53,555	41,139	1,711	89,826	195,663	51.4	184,715	88,442	102,713	202,650
	10 mos.	156	2,684,858	651	3,350,078	497,026	452,229	15,973	813,498	1,875,918	56.0	1,474,160	742,440	795,377	925,664
Lehigh & Hudson River	Oct.	96	291,662	.....	292,383	47,664	42,585	8,745	100,732	208,758	71.4	83,625	32,658	27,082	8,745
	10 mos.	96	2,821,993	.....	2,831,266	439,866	380,377	81,011	1,009,909	1,995,308	70.5	835,958	324,228	269,352	184,336
Lehigh & New England	Oct.	193	902,052	.....	908,835	76,967	114,019	10,853	236,912	468,607	51.6	440,228	187,020	254,158	205,652
	10 mos.	193	7,534,744	.....	7,611,741	850,595	1,059,794	109,864	2,334,917	4,662,792	61.3	2,948,949	1,330,108	1,728,127	1,259,411
Lehigh Valley	Oct.	1,252	6,516,522	352,690	7,195,214	983,434	1,035,438	139,665	2,901,471	5,311,684	73.8	1,883,530	426,945	1,323,181	478,111
	10 mos.	1,252	59,761,008	3,543,279	66,670,340	9,157,496	10,363,930	1,386,570	29,617,523	53,016,144	79.5	13,654,196	4,167,643	7,717,430	4,216,724
Louisiana & Arkansas	Oct.	756	1,687,597	51,365	1,804,315	201,761	173,828	68,321	600,699	1,084,257	60.1	720,058	269,974	321,111	218,240
	10 mos.	756	15,811,048	571,825	17,011,731	1,849,045	1,560,797	480,362	5,425,649	9,788,743	57.5	7,222,988	2,862,485	3,046,104	1,981,831
Louisville & Nashville	Oct.	4,759	15,590,070	1,103,798	17,722,339	2,233,214	3,544,178	285,509	7,137,462	13,809,886	77.9	3,912,453	2,396,203	2,255,434	731,264
	10 mos.	4,759	150,131,435	13,068,624	173,122,116	24,035,638	35,723,957	2,916,615	72,836,889	141,524,032	81.8	31,598,084	21,198,918	17,601,006	12,593,166

Table continued on next left-hand page.

Who owns a Railroad Train?

For one of the most remarkable demonstrations of cooperation and standardization you'll find anywhere—just observe a passing freight train.

Each individual car may have come from any one of the several hundred individual roads that —collectively—constitute America's transportation system.

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Westinghouse Air Brake Co.

WILMERDING, PA.

To Direct popular attention to the remarkable achievements of American Railroads, this advertisement has been run in national media by Westinghouse Air Brake Co.

1948

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1948

Name of road		Av. mileage operated during period	Operating revenues			Operating Expenses					Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income	
			Freight	Passenger	Total (inc. misc.)	Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total				1948	1947
Maine Central	Oct.	988	1,829,223	169,386	2,139,358	450,422	471,054	18,543	849,282	1,857,513	86.8	281,845	150,396	114,395	144,001
	10 mos.	988	18,837,251	1,836,786	22,086,291	4,218,265	4,146,681	178,098	8,377,033	17,586,178	79.6	4,500,113	2,078,416	2,005,040	1,660,337
Midland Valley	Oct.	334	205,045	9	208,574	44,840	26,688	3,394	60,745	142,032	68.1	66,542	26,927	26,665	23,451
	10 mos.	334	1,716,882	184	1,758,220	402,974	208,476	30,601	563,892	1,274,622	72.5	483,598	226,136	177,710	210,366
Minneapolis & St. Louis	Oct.	1,401	1,810,744	8,073	1,885,668	316,047	288,503	107,968	598,457	1,397,351	74.1	488,317	216,289	224,634	147,006
	10 mos.	1,404	16,020,941	92,056	16,661,490	3,027,046	2,679,490	1,008,415	5,552,967	13,124,867	78.8	3,536,623	1,810,671	1,561,747	1,519,851
Minn., St. Paul & S. Ste. Marie	Oct.	3,225	3,959,969	128,941	4,306,071	611,298	538,646	63,278	1,339,541	2,657,188	61.7	1,648,883	707,835	876,838	704,917
	10 mos.	3,225	27,889,586	1,201,872	30,923,243	5,931,868	5,178,300	603,922	12,373,327	25,135,173	81.3	5,788,070	3,111,660	2,327,202	1,662,101
Duluth, South Shore & Atlantic	Oct.	530	545,993	10,535	590,312	89,178	86,334	17,891	212,423	417,120	70.7	173,192	23,543	120,011	71,534
	10 mos.	530	4,975,572	107,831	5,365,928	1,067,281	893,489	164,536	2,062,168	4,291,985	80.0	1,073,943	238,182	652,118	423,897
Spokane International	Oct.	152	194,913	1,092	209,522	37,619	22,076	3,724	73,814	146,595	70.0	62,927	26,491	22,531	32,629
	10 mos.	152	1,650,056	14,573	1,783,638	387,088	201,619	38,161	627,234	1,346,794	75.5	436,844	160,613	150,491	153,480
Mississippi Central	Oct.	148	208,929	46	214,103	47,750	22,233	11,871	52,923	144,029	67.3	70,074	24,886	25,076	20,699
	10 mos.	148	1,882,213	2,883	1,927,754	396,723	188,711	118,154	461,010	1,249,188	64.8	678,566	242,818	263,325	134,357
Missouri-Illinois	Oct.	172	463,248	339	468,411	66,290	41,555	6,509	123,757	246,537	52.6	221,874	85,238	118,022	80,822
	10 mos.	172	3,860,842	3,415	3,892,542	658,228	414,589	64,904	1,018,694	2,237,498	57.5	1,655,044	695,030	841,229	649,297
Missouri-Kansas-Texas Lines	Oct.	3,253	6,773,818	411,461	7,746,696	1,070,609	1,063,357	220,040	2,946,588	5,580,096	72.0	2,166,600	776,615	953,704	329,965
	10 mos.	3,253	58,958,734	3,806,105	68,087,345	9,154,920	9,163,551	2,141,970	26,818,128	50,003,833	73.4	18,083,512	6,859,660	7,557,470	4,363,993
Missouri Pacific	Oct.	7,009	16,618,829	1,095,479	19,487,167	3,187,444	2,998,046	402,414	7,269,642	14,484,016	74.3	5,003,151	1,858,309	2,518,508	1,790,627
	10 mos.	7,012	155,990,238	11,715,735	182,935,073	27,633,612	28,177,104	3,904,603	71,971,244	137,878,593	75.4	45,056,480	15,127,724	22,386,207	17,542,638
Gulf Coast Lines	Oct.	1,719	2,896,605	76,856	3,184,892	582,449	459,186	78,835	1,182,588	2,428,987	76.3	755,905	223,110	350,452	339,875
	10 mos.	1,723	35,985,069	904,066	38,503,958	7,422,506	4,316,451	770,403	12,582,280	26,274,392	68.2	12,229,566	3,362,667	6,211,367	4,992,794
International-Great Northern	Oct.	1,110	2,358,209	189,384	2,859,874	486,981	433,641	50,943	1,194,428	2,293,721	80.2	566,153	111,098	326,418	80,049
	10 mos.	1,110	23,380,951	1,969,645	27,874,087	4,711,459	4,167,664	500,202	12,553,846	23,161,270	83.1	4,712,817	1,120,549	2,009,799	918,804
Monongahela	Oct.	170	844,758	1,083	850,899	89,214	65,609	1,080	261,601	422,313	49.6	428,586	100,656	186,575	110,444
	10 mos.	170	7,035,842	11,686	7,104,605	785,690	646,384	14,473	2,171,503	3,670,198	51.7	3,434,407	930,823	1,309,423	1,447,184
Montour	Oct.	51	303,762	.....	306,333	40,405	80,057	824	95,202	226,470	73.9	79,863	59,721	69,347	71,977
	10 mos.	51	2,574,819	.....	2,586,938	240,958	720,100	7,454	809,666	1,874,909	72.5	712,029	589,796	710,041	624,742
Nashville, Chatt. & St. Louis	Oct.	1,051	2,620,184	168,502	3,103,836	424,672	488,211	104,112	1,257,993	2,451,360	79.0	652,476	386,922	264,283	164,861
	10 mos.	1,051	25,059,248	1,961,136	29,643,128	4,464,745	5,329,573	1,045,016	12,198,292	24,269,790	81.9	5,373,338	2,965,850	2,326,668	1,405,585
New York Central	Oct.	10,745	50,436,090	10,785,852	68,708,591	10,901,200	13,967,442	1,026,630	30,648,018	59,664,709	86.8	9,043,882	4,603,658	2,731,402	1,451,240
	10 mos.	10,745	464,408,063	109,564,507	640,890,390	91,973,311	129,679,910	10,119,269	285,943,228	547,522,843	85.4	93,367,547	44,954,636	30,406,843	19,907,725
Pittsburgh & Lake Erie	Oct.	223	3,731,038	93,435	3,970,686	508,167	1,025,849	66,300	1,331,433	3,108,306	78.3	862,380	631,732	795,607	748,485
	10 mos.	223	34,905,737	983,287	37,414,622	4,547,346	9,387,881	632,968	13,078,860	29,286,520	78.3	8,128,102	6,252,667	8,294,726	6,024,368
New York, Chicago & St. Louis	Oct.	1,687	9,459,503	149,403	9,833,944	965,334	1,236,842	232,991	3,266,148	6,024,015	61.3	3,809,929	1,637,131	1,764,562	1,046,249
	10 mos.	1,687	87,413,548	1,322,593	90,756,932	11,323,010	13,304,630	2,120,426	31,748,993	61,494,025	67.8	29,262,907	11,291,254	13,879,751	8,061,871
New York, New Haven & Hartford	Oct.	1,800	8,744,833	4,202,633	14,294,266	2,017,573	2,219,687	253,806	5,839,737	11,210,203	78.4	3,084,063	1,224,000	971,811	135,525
	10 mos.	1,823	81,566,186	47,087,782	142,544,234	20,851,660	19,988,155	2,461,233	60,024,764	112,391,571	78.8	30,152,663	11,386,000	9,086,566	4,221,709
New York Connecting	Oct.	21	268,133	.....	291,929	89,611	13,957	.....	59,345	164,896	56.5	127,033	60,290	101,093	—37,735
	10 mos.	21	2,311,307	.....	2,543,200	722,426	184,821	.....	683,760	1,615,775	63.5	927,425	623,837	634,048	130,337
New York, Ontario & Western	Oct.	544	630,732	3,192	680,193	101,382	98,318	31,172	304,178	568,352	83.6	111,841	39,641	799	—83,768
	10 mos.	544	6,039,505	161,759	6,690,614	1,137,847	1,090,060	299,959	3,422,548	6,263,173	93.6	427,441	413,858	—820,945	—921,441
New York, Susquehanna & Western	Oct.	120	382,590	40,566	441,577	37,398	52,629	5,591	174,423	292,315	66.2	149,262	24,899	94,173	19,990
	10 mos.	120	3,612,698	434,656	4,218,453	450,989	476,378	56,873	1,778,155	3,008,817	71.2	1,209,636	325,668	400,337	205,237
Norfolk & Western	Oct.	2,129	16,053,044	515,570	17,142,361	2,039,234	3,076,896	276,983	5,080,398	11,027,545	64.3	6,114,816	3,294,919	3,968,562	3,293,721
	10 mos.	2,129	144,032,257	5,056,466	154,754,407	19,214,831	28,167,012	2,638,860	48,028,744	103,311,918	66.8	51,442,489	28,755,580	33,279,625	28,537,028
Norfolk Southern	Oct.	726	800,894	.....	820,953	166,620	86,763	39,711	247,690	599,421	73.0	221,532	109,586	89,695	62,955
	10 mos.	726	8,146,453	1,094	8,388,516	1,651,380	849,510	395,675	2,862,339	6,277,411	74.8	2,111,105	1,052,717	810,610	323,460
Northern Pacific	Oct.	6,889	14,169,960	593,589	15,841,736	2,501,959	2,223,647	246,699	5,122,686	10,658,217	67.3	5,183,519	2,491,557	3,094,332	2,543,048
	10 mos.	6,901	113,192,347	6,033,099	129,464,745	21,865,480	23,344,608	2,514,490	46,509,943	100,398,282	77.6	29,066,463	15,105,077	16,732,682	14,309,990
Northwestern Pacific	Oct.	331	729,630	9,600	788,852	145,183	90,456	5,370	374,460	618,375	78.4	170,477	39,067	91,285	—44,711
	10 mos.	331	6,891,311	90,504	7,257,840	1,575,092	834,652	42,847	3,333,557	5,941,951	81.9	1,315,889	357,037	512,106	417,735
Oklahoma City-Ada-Atoka	Oct.	132	108,608	.....	110,438	25,835	6,057	1,365	30,053	67,056	60.7	43,382	18,389	12,851	—320
	10 mos.	132	895,257	2	911,923	217,498	43,848	12,820	236,089	541,582	59.4	370,341	146,105	113,788	46,307
Pennsylvania	Oct.	10,108	70,787,063	13,170,466	91,735,926	10,786,850	16,819,719	1,292,230	38,793,868	70,807,002	77.2	20,928,924	7,338,258	12,141,208	3,226,633
	10 mos.	10,108	628,122,523	132,347,656	832,744,401	98,932,452	174,584,208	12,378,493	375,059,012	692,002,671	83.1	140,741,730	70,831,367	58,505,839	27,396,411
Long Island	Oct.	376	1,798,861	2,731,519	4,737,697	671,267	841,088	47,103	2,576,629	4,287,543	90.5	450,154	477,386	—377,950	—261,735
	10 mos.	376	14,032,913	28,329,483	44,557,024	6,777,489	7,820,415	317,046	23,378,371	39,282,423	88.2	5,274,601	4,544,313	—2,464,203	—1,015,211

Table continued on next left-hand page.

1810-1948
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MERRY CHRISTMAS
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HAPPY NEW YEAR
for all our friends

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Vice President and
General Manager

H. A. Raymond
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REVENUES AND EXPENSES OF RAILWAYS

MONTH OF OCTOBER AND TEN MONTHS OF CALENDAR YEAR 1948

Name of road	Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Railway tax accruals	Net railway operating income 1948	1947
Pennsylvania-Reading Seashore Lines	Oct.	638,153	202,036	871,812	202,715	117,841	9,738	573,305	937,793	107.6	—65,981	95,362	—318,873	—316,898
	10 mos.	5,834,177	3,874,397	10,115,378	2,068,394	1,208,199	110,073	6,294,939	9,985,729	98.7	129,649	960,260	—2,268428	—1,577,118
	Oct.	388	.....	235,381	115,204	41,086	3,858	68,209	237,834	101.0	—2,453	—25,266	9,493	36,585
Pittsburgh & Shawmut	10 mos.	97	.....	2,631,600	583,727	405,931	32,093	722,797	1,832,171	69.6	799,329	279,758	375,440	535,814
	Oct.	135	84	793,867	130,086	132,589	41,556	177,427	514,694	64.8	279,173	129,048	181,939	108,638
Pittsburgh & West Virginia	10 mos.	6,988,225	89	7,282,967	1,057,878	1,261,657	391,307	1,719,142	4,758,005	65.3	2,524,962	1,133,091	1,635,754	978,414
Reading	Oct.	10,358,111	655,474	11,582 875	2,008,727	2,181,310	128,953	4,289,066	8,902,779	76.9	2,680,096	1,270,124	1,368,944	1,200,761
	10 mos.	95,633,203	6,630,173	107,643,320	17,922,821	20,342,460	1,268,513	41,617,232	84,157,304	78.2	23,486,016	11,142,741	11,771,764	10,062,012
Richmond, Fredericksburg & Potomac	Oct.	1,219,879	426,250	1,866,170	276,911	328,322	20,473	799,480	1,544,712	82.8	321,458	213,582	53,349	82,113
	10 mos.	13,462,217	5,660,944	21,577,413	2,765,378	3,195,623	192,104	8,641,073	16,063,040	74.4	5,514,373	2,539,659	2,141,279	2,002,070
Rutland	Oct.	417,890	44,654	550,634	76,717	106,173	13,364	283,987	497,755	90.4	52,879	29,249	—5,544	19,086
	10 mos.	4,110,966	398,643	5,325,059	722,706	961,957	137,694	2,753,167	4,753,056	89.3	572,003	298,137	87,786	—511,058
St. Louis, San Francisco & Texas	Oct.	252,132	.....	288,674	86,766	19,652	2,291	89,225	204,470	76.1	64,204	14,533	27,173	19,513
	10 mos.	3,673,996	161	4,002,925	515,783	350,717	160,206	1,758,677	2,888,722	72.2	1,114,203	372,708	461,127	—326,166
St. Louis Southwestern Lines	Oct.	5,834,043	77,208	6,108,641	581,616	653,204	136,231	1,882,280	3,420,526	56.0	2,688,115	1,183,239	1,288,413	594,449
	10 mos.	50,177,948	689,914	52,568,531	5,694,892	6,180,332	1,354,089	17,096,063	32,009,334	60.9	20,559,197	8,553,784	9,796,253	8,163,417
	Av.	1,575	1,139,129	10,492,167	1,632,021	2,029,484	327,855	4,023,349	8,522,222	81.2	1,969,945	896,182	932,332	501,455
Seaboard Air Line	Oct.	4,153	8,503,955	110,346,648	16,639,821	19,562,651	3,075,073	41,994,537	86,373,026	78.3	23,973,622	10,349,719	11,412,690	7,243,340
	10 mos.	4,152	13,480,313	21,075,009	3,026,144	3,755,910	348,816	8,109,673	16,075,571	76.3	4,999,438	2,271,407	2,454,095	1,941,169
Southern Railway	Oct.	6,477	1,677,000	204,043,588	27,923,479	36,201,304	3,488,372	78,433,629	153,860,836	75.4	50,182,752	23,065,007	24,007,098	16,940,042
	10 mos.	172,599,796	17,741,492											
Alabama Great Southern	Oct.	1,334,991	127,320	1,566,379	226,133	326,091	30,294	559,006	1,200,277	76.6	366,102	213,313	179,065	184,513
	10 mos.	13,132,094	1,240,521	15,273,138	2,041,748	3,079,589	303,632	5,225,783	11,172,734	73.2	4,100,404	2,371,186	2,171,930	1,384,482
Cinn., New Orleans & Texas Pacific	Oct.	3,003,531	210,201	3,377,866	498,974	632,445	60,424	1,025,568	2,329,293	69.0	1,048,573	571,921	612,893	607,088
	10 mos.	29,724,698	2,105,644	33,303,542	4,079,322	6,261,658	592,115	9,898,787	21,849,076	65.5	11,514,466	5,894,323	6,862,555	5,052,939
Georgia Southern & Florida	Oct.	462,687	46,951	568,624	113,067	71,808	8,324	228,600	437,678	77.0	130,946	29,268	19,862	15,425
	10 mos.	4,787,853	644,303	5,966,856	1,253,717	743,507	79,466	2,216,071	4,459,639	74.7	1,507,217	412,771	394,465	258,754
New Orleans & Northeastern	Oct.	985,727	71,451	1,111,389	149,946	133,411	19,235	288,706	633,740	57.0	477,649	217,449	207,042	229,677
	10 mos.	9,454,178	681,940	10,670,730	1,451,612	1,118,099	185,918	2,610,492	5,736,485	53.8	4,934,245	2,158,883	2,238,248	1,557,011
Southern Pacific	Oct.	204	3,866,419	41,127,891	4,487,651	8,117,791	732,306	17,250,797	32,643,965	79.4	8,483,926	2,741,480	2,985,801	2,261,297
	10 mos.	8,173	34,732,773	41,190,084	382,784,908	4,487,651	71,829,305	6,942,999	156,952,917	299,527,884	78.2	83,257,024	38,345,882	31,938,438
Texas & New Orleans	Oct.	8,186	315,012,660	382,784,908	43,359,401	71,829,305	6,942,999	156,952,917	299,527,884	78.2	83,257,024	38,345,882	31,938,438	26,518,164
	10 mos.	4,316	10,013,977	11,589,796	1,308,645	1,847,940	205,419	4,457,141	8,290,382	71.5	3,299,414	1,298,230	1,382,776	1,261,297
Spokane, Portland & Seattle	Oct.	4,316	91,425,648	106,893,990	13,471,291	15,164,335	2,016,593	42,407,393	77,680,030	72.7	29,213,930	11,535,260	12,143,459	11,880,355
	10 mos.	945	2,161,181	2,359,239	716,505	199,889	19,157	866,281	1,905,230	80.8	454,009	199,547	103,763	163,342
Tennessee Central	Oct.	945	19,176,898	21,478,966	4,856,025	2,274,286	198,105	8,083,472	16,434,448	76.5	5,044,518	1,596,100	1,823,155	1,197,250
	10 mos.	286	376,883	403,083	81,336	58,593	8,153	180,782	344,989	85.6	58,094	27,544	67,386	—120,816
Texas & Pacific	Oct.	286	3,666,483	3,902,229	640,067	659,372	87,136	2,439,787	4,720,890	71.9	1,849,245	233,843	809,060	619,009
	10 mos.	1,854	5,624,450	6,570,135	807,136	1,007,182	172,079	2,449,537	4,711,593	73.9	1,849,245	233,843	768,218	5,973,559
Texas-Mexican	Oct.	1,854	55,096,089	64,604,135	8,060,872	9,710,141	1,604,120	25,449,537	47,711,593	73.9	16,892,542	6,423,466	7,132,292	5,973,559
	10 mos.	162	226,760	.....	260,021	57,942	40,083	7,001	67,051	186,280	71.6	73,741	42,289	14,988	62,110
Toledo, Peoria & Western	Oct.	162	2,338,815	.....	2,656,324	471,039	331,362	58,478	656,443	1,707,743	64.3	948,581	467,435	291,847	514,942
	10 mos.	239	507,523	—22	517,976	118,036	24,543	34,840	108,607	313,464	60.5	204,512	82,249	95,331	26,344
Union Pacific	Oct.	239	3,763,236	—38	3,834,450	742,911	235,264	331,290	980,819	2,590,121	67.5	1,244,329	467,312	558,489	—338,931
	10 mos.	9,751	36,338,524	3,096,778	42,432,413	5,131,137	6,919,125	793,806	14,175,520	28,982,032	68.3	13,450,381	6,199,746	5,648,644	4,144,861
Utah	Oct.	9,752	297,778,873	35,996,488	362,788,925	50,462,276	59,099,873	7,762,603	126,735,696	264,276,637	72.8	98,512,288	50,870,289	35,871,441	29,446,058
	10 mos.	111	126,179	.....	126,435	34,337	48,167	608	54,377	145,380	115.0	—18,915	12,455	—14,755	—13,997
Virginian	Oct.	111	1,352,657	.....	1,356,604	317,594	474,447	6,378	558,216	1,435,594	105.8	—78,990	123,080	—117,653	17,341
	10 mos.	663	3,283,170	5,288	3,398,136	422,399	618,328	44,703	856,186	2,022,280	59.5	1,375,856	695,000	916,129	843,878
Wabash	Oct.	661	30,362,242	55,079	31,334,895	3,798,791	6,633,638	391,418	8,111,892	19,799,793	63.2	11,535,102	5,916,860	7,565,969	7,684,897
	10 mos.	2,393	9,289,238	450,179	10,425,238	1,273,971	1,231,611	263,602	3,879,055	6,996,779	67.1	3,428,459	1,338,014	1,678,297	980,691
Western Maryland	Oct.	2,393	78,869,070	4,652,614	89,450,970	12,228,422	11,740,624	2,522,192	34,580,327	64,350,667	71.9	25,100,303	9,726,742	11,124,276	8,141,176
	10 mos.	294	794,000	8,006	819,806	92,261	145,841	23,837	314,543	603,624	73.6	216,182	88,412	105,094	75,116
Western Pacific	Oct.	294	7,245,979	44,035	7,539,650	916,314	1,466,295	224,196	3,003,410	5,784,534	76.8	1,755,116	752,972	824,600	510,330
	10 mos.	837	3,900,157	11,265	4,038,126	533,569	761,132	68,409	1,231,600	2,727,723	67.5	1,310,403	636,000	829,926	857,780
Wheeling & Lake Erie	Oct.	837	36,016,825	136,805	37,354,937	4,815,197	7,105,262	661,164	11,912,262	25,731,756	68.9	11,623,171	5,404,000	7,521,582	6,485,284
	10 mos.	1,195	4,584,483	119,333	4,777,633	518,118	584,607	144,726	1,535,034	3,004,546	62.9	1,773,087	817,811	812,226	804,709
Wisconsin Central	Oct.	1,195	34,323,672	1,676,678	36,995,623	5,090,400	5,963,692	1,335,988	13,057,628	27,437,306	74.2	9,558,317	4,004,078	4,806,579	3,498,035
	10 mos.	505	3,194,443	.....	3,381,821	395,301	452,577	59,671	991,749	1,978,416	58.5	1,403,405	660,500	937,644	587,716
	Oct.	505	29,492,829	39,594	31,011,191	3,944,133	4,319,992	605,563	9,187,463	18,810,069	60.7	12,201,122	6,185,932	7,863,337	5,413,455
	10 mos.	1,051	2,436,424	2,637,143	358,475	348,085	59,635	1,006,255	1,858,292	70.5	778,851	327,343	317,141	246,487
	Oct.	1,051	23,039,393	479,277	25,053,172	3,258,925	3,557,788	573,412	9,877,732	18,094,989	72.2	6,958,183	2,303,946	3,278,783	2,969,735

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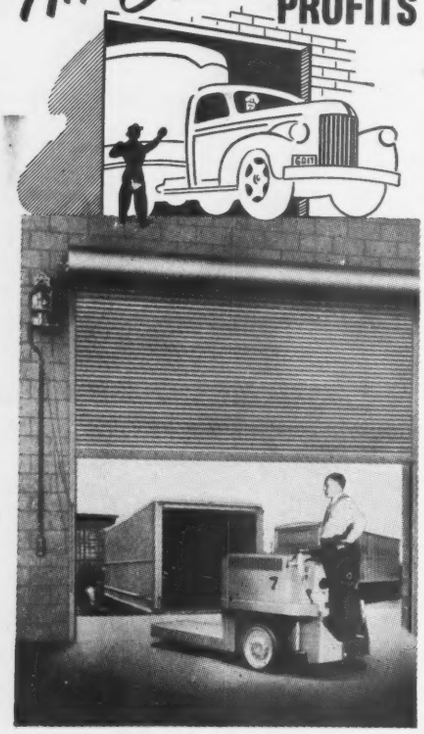

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General News

(*Continued from page 70*)

T. P. & W. Adopts Employee Suggestion Plan

The Toledo, Peoria & Western has established an employee's suggestion system, with cash awards to employees for new ideas to improve service or efficiency, J. Russel Coulter, president of the company, has announced. The suggestion system was created after a careful study of other employee suggestion plans, President Coulter stated. All suggestions submitted by employees are reviewed by a committee composed of heads of departments and brotherhood representatives.

U.S. Supreme Court Will Review Mail-Pay Ruling of Claims Court

The United States Supreme Court has decided to review a decision of the United States Court of Claims which awarded the Georgia & Florida mail pay higher than that fixed by the Interstate Commerce Commission and paid by the Post Office Department for the period from April 1, 1931, through February 28, 1938. The review will involve two cases in which the high court granted petitions for writs of certiorari.

One case embodies the government's appeal from the Court of Claims ruling, and the other an appeal by the G. & F. receiver who contends that the Claims Court should have added interest to the amount awarded. The Claims Court's decision, which awarded $186,707, was based on findings that the amount fixed by the commission was insufficient to compensate the road for performing the mail service and provide also a return of 5.75 per cent on the investment in road and equipment devoted to such service.

The government's petition to the Supreme Court pointed up the fact that the cases raised questions as to the reviewability of I.C.C. orders by the Court of Claims. Before going to the latter tribunal, the G.&F. receiver had succeeded in having the I.C.C. order set aside by a statutory three-judge court, only to lose that previous case when the government appealed to the Supreme Court and obtained a reversal of the lower court's determination.

Lahey, L. & M. Chairman, Gets Chicago Civil Service Post

C. A. Lahey, chairman of the board, Litchfield & Madison, has been appointed to the Civil Service Commission of Chicago by Mayor Martin H. Kennelly. Mr. Lahey, who has never before held public office, was elected chairman of the L. & M. on December 16, 1946. Prior to that time, he had been vice-president, traffic, of the Quaker Oats Company, and before that, general freight agent of the Chicago, Milwaukee, St. Paul & Pacific.

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Current Publications

TRADE PUBLICATIONS

Facts About Douglas Fir Plywood. 24 pages. Issued by the Douglas Fir Plywood Association, Tacoma Building, Tacoma 2, Wash.

A booklet illustrated with charts and tables, presenting, in question-and-answer form, data concerning production, distribution and uses of Douglas Fir plywood.

The Latest Development for Materials Loading. 12 pages. Issued by the Pettibone Mulliken Corporation, 4700 W. Division st., Chicago 51.

A circular on Haiss heavy-duty bucket loaders equipped with swivel belt conveyors. It gives the principal specifications of the various models and describes and illustrates various applications of the machine in materials handling.

Railroad Snow Loader-Melter. Bulletin No. 568, four pages, illustrations. Published by the Barber-Greene Company, Aurora, Ill.

This folder deals with the Barber-Greene Model 568 snow loader with melting tank unit. It describes the operation of the snow removal plant, and contains several pictures of the equipment in action.

Wilson "All-Cast" Radiation Elements. Bulletin No. 40, eight pages, illustrations. Published by the Wilson Engineering Corporation, Chicago.

This bulletin describes and illustrates the characteristics and uses of Wilson cast iron and aluminum radiation elements for locomotives and stationary compressors and compressor intercoolers, Diesel fuel oil heating units, bake oven radiation, and exhaust gas heat recovery. It also contains descriptions of Wilson unit heaters and Wilson mobile de-icing and drying machines.

Rust-Oleum Stops and Prevents Rust. 16 pages. Published by the Rust-Oleum Corporation, Evanston, Ill.

This bulletin outlines the rust-preventive qualities of Rust-Oleum for industrial, railroad, marine and general use, and also gives directions for its use and application. It contains 48 color cards showing the various colors in which Rust-Oleum is obtainable, and 22 color panels of machinery and implement finishes. The concluding section of the bulletin outlines recommendations for the use of Rust-Oleum on building materials requiring a liquid sealer.

Load Ties Fast at Lower Cost. Four pages. Issued by B. L. Montagne Co., Inc., Sumter, S. C.

A bulletin containing specifications for, and describing and illustrating, the Montagne crosstie loader.

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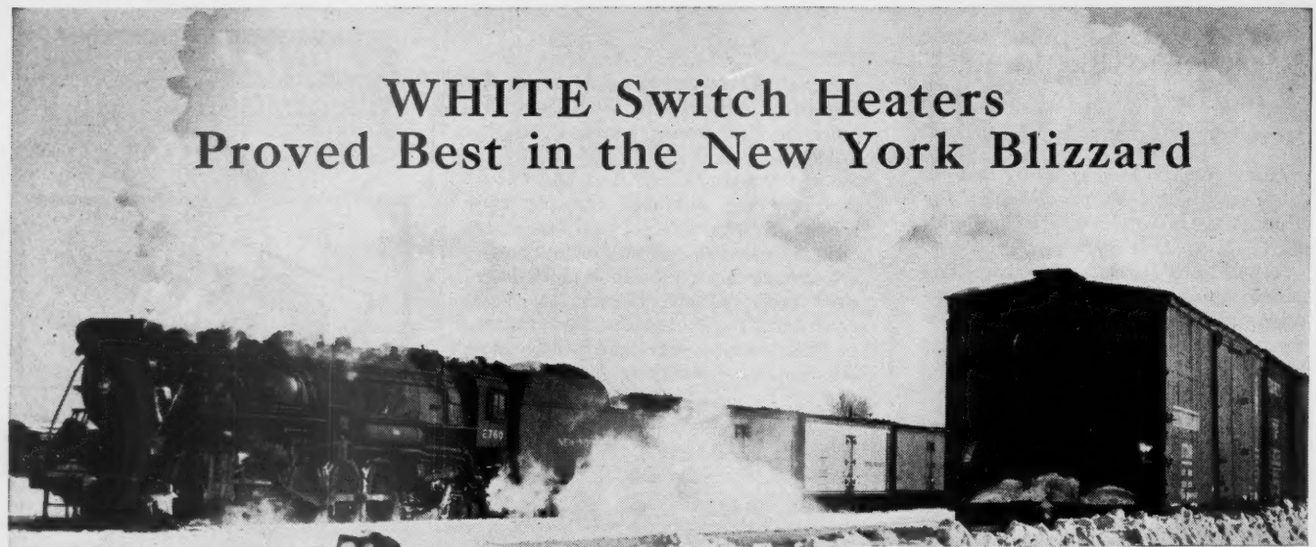

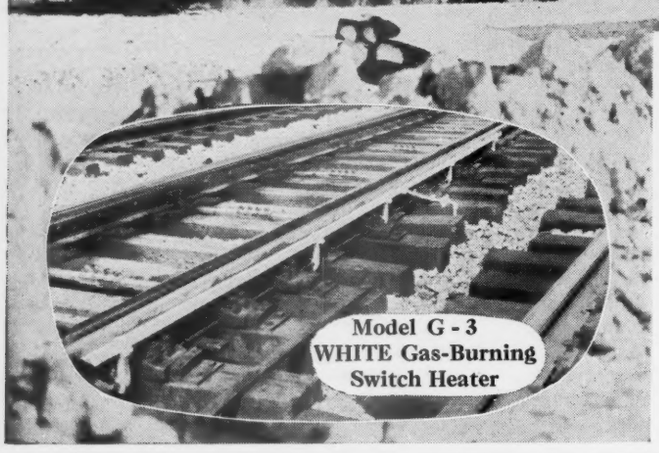

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